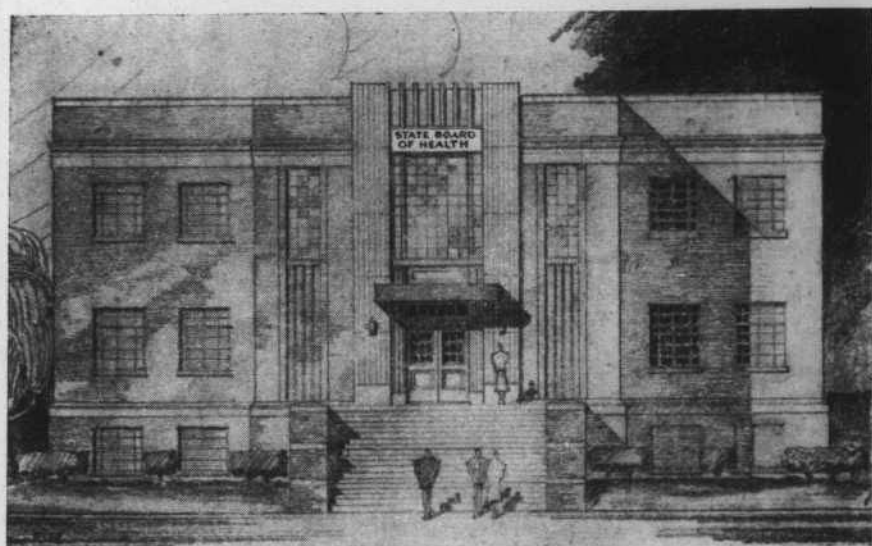


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F L O R I D A

HEALTH NOTES

FIFTY YEARS OF PUBLIC HEALTH
1889 - 1939



VOL. 31, Nos. 1-2

JANUARY-FEBRUARY, 1939

FLORIDA STATE BOARD OF HEALTH, JACKSONVILLE, FLORIDA



W. A. McPhaul, M.D.
State Health Officer

FLORIDA HEALTH NOTES

ESTABLISHED 1890

OFFICIAL MONTHLY PUBLICATION OF THE
STATE BOARD OF HEALTH
JACKSONVILLE, FLORIDA

HON. FRED P. CONE, GOVERNOR OF FLORIDA

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STATE HEALTH OFFICER

Entered as Second Class Matter, Oct. 27, 1921, at the Postoffice at Jacksonville, Fla., Under the Act of Aug. 24, 1912

VOL. 31

JANUARY-FEBRUARY, 1939

NOS. 1-2

FIFTY YEARS AGO

W. A. McPHAUL, M.D., *State Health Officer*

The Florida Legislature in special session created the Florida State Board of Health. The Board consisted of three members.

The activities of that first Board were carried out by Dr. J. Y. Porter, first State Health Officer, and one assistant. The headquarters were one room in the old Dyal-Upchurch Building in Jacksonville.

The population of Florida at that time was not quite 400,000. Now in 1939 the total estimated population of Florida is 1,698,000.

This enormous expansion of population, from 400,000 to 1,698,000 created new duties for the State Board of Health. Medical science in these intervening years has discovered many new ways to protect the health of the people. Diseases which formerly took great toll of

life are now known to be preventable.

The importance of pure water supply, sanitary sewage disposal, vaccination against communicable diseases, care of expectant mothers and young children, the control of such diseases as tuberculosis and malaria, the necessity for greater laboratory service to the physicians of Florida, food sanitation, and many other public health measures has increased the duties and the necessity for a larger staff of workers for the State Board of Health.

This issue of HEALTH NOTES, commemorating fifty years of public health in Florida, is presented in order that the citizens of Florida may know those under whose guidance the activities of the State Board of Health are carried forward.

ENGINEERING

GEORGE F. CATLETT, C.E., *Chief Engineer*
Bureau of Engineering

The engineer must shoulder much of the responsibility for the protection of the public health. A community without proper water supply and sewage disposal is a community in danger of invasion by many diseases. It is one of the duties of the Bureau of Engineering to advise and assist officials of the cities and towns of the state with their water supply and sewage problems.

Malaria control would be impossible without engineering practice to aid in drainage and other methods of mosquito eradication. The Bureau of Engineering watches over the sanitation of areas from which oysters are taken and inspects the sanitary ar-

rangements of oyster shucking houses, in order that the public may be assured of fresh pure oysters.

All public swimming pools and bathing places are inspected by this Bureau, and every tourist camp is certified for proper water supply and sewage disposal. Another service for the travelling public is the inspection of roadside eating places which do not come under the jurisdiction of city or county health departments.

The Bureau of Engineering employs a trained milk sanitarian, who advises with county health officers about the milk sanitation problems of their areas.



DENTAL HEALTH

LLOYD N. HARLOW, D.D.S., *Director*
Bureau of Dental Health

With but one exception, dental defects are the most prevalent of all diseases. Realizing that education in proper dental care will reduce considerably the incidence of systemic diseases not only in children but in adults, the Bureau of Dental Health is very active with a program of "prevention by education."

The Bureau works in close cooperation with the Florida State Dental Society, and its program is conducted principally in the schools in conjunction with full-time local health departments.

A dental inspection program is conducted throughout the state with the cooperation of local dentists, and children in elementary

grades are included. If dental defects are found, an inspection notice is sent to the parents of the children recommending complete examination by the family dentists.

The educational activities of this Bureau include talks by the Director and his field assistant, the distribution of literature on dental hygiene, instruction in the importance of proper diet to good teeth and in the relationship of proper dental care to general health. A program for teaching dental health in the schools is also another important feature of the Bureau's program.



PUBLIC HEALTH NURSING

RUTH E. METTINGER, R.N., *Director*
Bureau of Public Health Nursing

The Bureau of Public Health Nursing supervises a generalized nursing service including the control of communicable diseases, school hygiene, and maternity and infant welfare. Consultant nurses of the Bureau specialize in tuberculosis, local and county health work, and midwifery.

This Bureau supervises all WPA nursing projects, and also acts in an advisory capacity to the other nurses employed by the Red Cross, school boards and county commissioners, and makes recommendations to these organizations as to qualified personnel. Applications are also sent to the county health officer when nurses are to be employed in full-

time local health units, the final appointment being made by the health officer.

Public health nurses cooperate with the Bureau of Vital Statistics in informing the

public about the necessity for birth registration. The nurses give special attention to the problem of tuberculosis and venereal disease among the colored population. The midwife consultant works with the Bureau of Maternal and Child Health by holding midwife classes regularly, and advising with the district and county nurses about this work.

The activities of the public health nurse bring her into contact with all public health problems.



DISTRICT AND LOCAL HEALTH WORK

A. B. McCREARY, M.D., *Director*
District and County Health Work

To receive efficient health protection, all communities should be served by a full-time health department. Only in this way are health officials able to know and act upon the needs of a given area.

The director of a local health department serving the population of one county, or three or more small counties, is in close touch with all the health problems of the territory. He is acquainted with the local problems of school sanitation, public water supply, milk supply. He knows the communicable disease incidence of this area and can carry on a control program to rid the community of much unnecessary illness.

The local health department constantly conducts a health education program to acquaint the people of the county with prevention methods. The department is an efficient, ever alert guardian of the public health.

The Bureau of District and County Health Work is directly concerned with the formation of full-time local health departments. Surveys of health needs and recommendations as to the establishment of such local health units in the counties of Florida are made by this Bureau.

Seventeen counties of Florida now have full-time local health units, and the aim of the State Board of Health is one unit in each county.



MATERNAL AND CHILD HEALTH

F. V. CHAPPELL, M.D., *Director*
Bureau of Maternal and Child Health

The Bureau of Maternal and Child Health carries on a program of consultation, education and demonstration services to local communities in better care for mothers and children.

Florida has one of the highest maternal mortality rates in the United States. There is great need for more adequate prenatal and postnatal care of mothers and babies.

This Bureau, working with full-time local health departments and with local medical societies, is establishing clinics where mothers who otherwise would have no prenatal care may come for examination and instruction.

Well-baby clinics and preschool immunization

against preventable diseases are also a part of the Bureau's program.

There are many phases of maternal and child welfare that are distinctly public health problems and can only be solved by the application of large scale programs such as that now inaugurated by this Bureau.

Maternal mortality can be materially reduced when all expectant mothers are given proper care. This means information about the necessity for such care must be given all expectant mothers. Many deaths of infants under one year can be prevented when knowledge of how to protect children from these diseases becomes known generally.



ACCOUNTING

G. WILSON BALTZELL, *Auditor*
Division of Accounting

Every business, whether public or private, must have a record of funds received and how they are spent. The Division of Accounting has this important function to fulfill.

The State Board of Health is supported by tax funds from the state and it also receives Florida's share of the funds for public health as specified in the National Social Security Act. These federal funds are distributed through two national agencies, the United States Public Health Service and the United States Children's Bureau.

Each fund, the amount received and its expenditure, must be carefully budgeted and accounted for, the records

of which are kept not only in the Florida offices but also in the Washington offices. All monies to be used for the support of local county health departments are dispersed from the State Board of Health's Division of Accounting.

The Division of Accounting, which is under the supervision of the State Health Officer, is directly responsible for the carrying out of these important tasks of bookkeeping and recording.

Each Bureau of the State Board of Health operates upon a fixed budget. The Division of Accounting is at all times prepared to assist each Bureau with its budget problems.



HEALTH EDUCATION

ELIZABETH BOHNENBERGER, *Director*
Division of Health Education

The beginnings of organized public health were primarily quarantine duties and attempts to control contagious diseases after they had reached epidemic proportions. Today it is the duty of public health workers to inform all people about the known preventive means for many of these diseases. Recognizing that until these facts are matters of common knowledge there will still be a large incidence of preventable disease, all public health work is now planned from the health education viewpoint.

Every department of the State Board of Health participates in health education. The function of the Division of Health Education is

to coordinate these activities and to act as a distribution center for educational materials and methods.

Moving pictures on health subjects are loaned through this Division and literature dealing with preventable disease is also distributed. Education through the public press is another function of the Division.

The Division of Health Education maintains a Library which is used by both public health workers and practicing physicians in Florida. The editing of the monthly bulletin of the State Board of Health, *FLORIDA HEALTH NOTES*, is also a function of this Division.



VITAL STATISTICS

EDWARD M. L'ENGLE, M.D., *Director*
Bureau of Vital Statistics

Every sound health program must be built upon the most complete statistical information available regarding the health conditions of the locality to be served. Vital statistics constitute the record from which health officials learn what is happening to the population of every city, county and village in Florida. From these statistics it is possible to know whether a particular cause of death occurs more often in one age than another, more often in males than in females, in the white population, or Negro.

"The science of vital statistics is interwoven with the beginning and end of life. It touches human welfare at every point. It will serve your

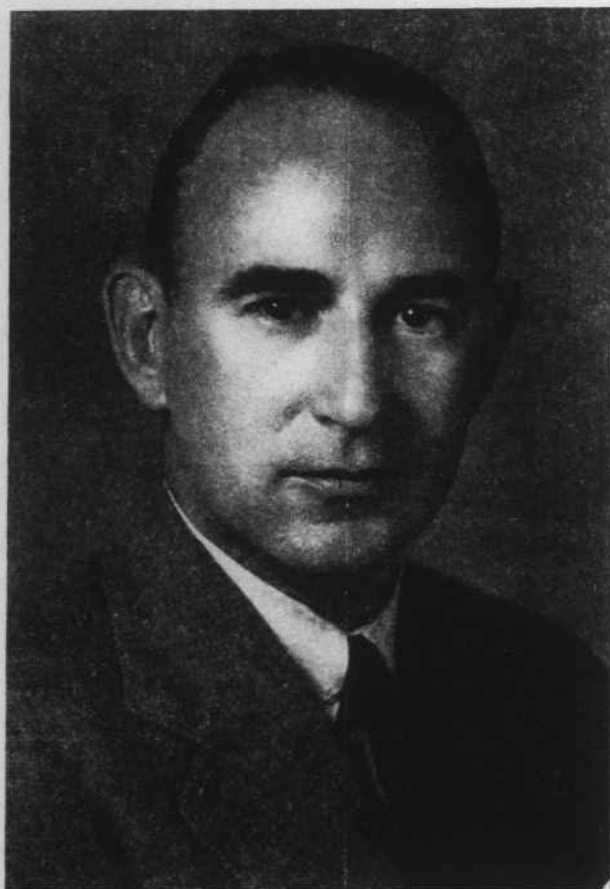
children and your children's children. It is a subject worthy of the interest, the approval and the aid of every citizen. It is an autobiography to which every citizen contributes, and which in the aggregate, forms the autobiography of a community, a state, a nation."

The Bureau of Vital Statistics has on file birth and death records, records of marriages performed and divorces granted. The death records are classified according to cause. Accurate figures of how many Florida citizens died of such diseases as tuberculosis, malaria, heart disease, etc. are a measuring rod by which the public health program is planned.



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Mari

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Manna



A. WM. MORRISON, Ph. G.
Miami

LABORATORIES

J. N. PATTERSON, M.S., M.D., *Director*
Bureau of Laboratories

Medical science has brought the diagnosis of certain disease conditions to an exact science in which laboratory tests are a necessity in the routine practice of any physician today. The State Board of Health laboratories perform this valuable service by assisting practicing physicians and health officers, and through them the citizens in general, in the prevention, diagnosis and control of disease.

Among the tests conducted regularly in these laboratories are: Kahn test for syphilis; virulence tests for diphtheria; agglutination tests for typhoid, paratyphoid A and B, undulant fever, tularemia and typhus fever; and examina-

tions for malaria, tuberculosis, intestinal parasites and gonorrhea. The laboratories also examine, as to purity, samples of water both from private and public water supplies. Milk is examined as to its purity and content of butterfat. Blood cultures, stool cultures and many other miscellaneous bacterial examinations are performed in the laboratories.

The four branch laboratories are located at Tallahassee, Miami, Tampa and Pensacola, the main laboratory is in Jacksonville.

All of the laboratories combined did a total of 430,000 tests for the year 1938, an increase of 50,000 tests over the previous year.



DRUG INSPECTION-NARCOTIC SERVICE

M. H. Doss, *Chief Inspector*
Division of Drug Inspection, Narcotic Service

The Division of Drug Inspection, Narcotic Service, has the responsibility of enforcing the terms of the Florida Drug and Sign Act, a bill sponsored some years ago by the druggists of the state to prohibit the unlicensed selling of medicines by persons unqualified to do so.

The Drug and Sign Act requires that every store displaying the word "Drugs" must register with the State Board of Health. The Division has charge of this registration and the name of every licensed store is on file in its office.

The Drug and Sign Act also provides that every such store must have a licensed, registered pharmacist on duty

at all times while the store is open to the public. The provisions of this section of the Act insure the public of properly compounded prescriptions and eliminates the hazard of this important function being attempted by persons without knowledge of pharmacy.

The Federal Uniform Narcotic Act was adopted by Florida some years ago. This Act, designed to control the illegal peddling of opium and marihuana and other habit-forming drugs, is an important public health measure. The Division of Drug Inspection, Narcotic Service, works with the Federal government in enforcing this law by apprehending and convicting drug peddlers in Florida.



VENEREAL DISEASE CONTROL

L. C. GONZALEZ, M.D., *Director*

Division of Venereal Disease Control

The Division of Venereal Disease Control has recently been established, with financial assistance from the Federal Venereal Disease Control Act of May 24, 1938.

The incidence of syphilis and gonorrhea in Florida is high, and it is the purpose of the Division of Venereal Disease Control to lower this rate through the education of the people in the dangers of these diseases and methods of control.

The Division has made a study of present venereal disease treatment facilities in the state and has allocated funds to various cities and counties for clinics and the purchase of drugs. Drugs are also distributed to private

physicians on request, for treatment of indigent patients.

Venereal diseases take an enormous toll of life, health, and money from the people of this state. The economic loss alone has been reckoned in the hundreds of thousands of dollars.

The effort to combat syphilis is now nationwide and gives promise of accomplishing more than has ever been done in the past. The people are aroused to the dangers inherent in refusing to acknowledge the existence of syphilis. Newspapers, radio, the moving picture, the popular magazines are all beginning to take their part in informing the people about syphilis.



EPIDEMIOLOGY

DAN N. CONE, M.D., *Director*

Bureau of Epidemiology

The study of the cause and spread of preventable diseases is necessary if these diseases are to be controlled. This is a major function of the Bureau of Epidemiology.

Private physicians are required by law to report all cases of communicable diseases in their practice and also other illnesses of public health importance. This is an important service which the physician renders in the cause of public health.

These disease figures are studied by the State Board of Health staff and the conclusions of the Bureau of Epidemiology used as a basis for public health endeavour. They are one of the most important means by which health

officers in full-time local health units are able to judge what diseases are most prevalent and what measures are needed to control and eventually eliminate them.

The Bureau of Epidemiology works in close association with these local health units and is thus able to utilize the beneficial results of its studies to the greatest extent.

The reporting of disease incidence by private physicians and the study of the causative factors behind disease incidence by the Bureau of Epidemiology is a cooperative effort which will do much toward the eradication of preventable illness.



TUBERCULOSIS

A. J. LOGIE, M.D., *Director*
Division of Tuberculosis

The eventual elimination of tuberculosis from the population must be done through a program of education in means of prevention. Active cases of the disease must be found in an early form chiefly by x-ray examinations, with or without preliminary tuberculin testing which is of questionable value. All persons in contact with cases of tuberculosis must be examined by these means so that the spread of the disease may be prevented.

The treatment of the early case of tuberculosis, preferably in a sanatorium is a powerful weapon in the fight against the disease. Proper care and the rehabilitating of those cases dismissed from the sanatorium as cured

(arrested) is another necessary step, so that relapse does not occur.

The Division of Tuberculosis of the State Board of Health carries on such a program, in addition to an educational program designed to inform the general population about the importance of tuberculosis control.

This Division also aids in the selection of cases to be admitted to the State Tuberculosis Sanatorium, and in follow-up service among patients released from the Sanatorium. Consultation service on chest diseases is given.

The program is carried out in conjunction with full-time local health departments and in cooperation with the local medical societies.



The State Board of Health exists for the purpose of guarding the highest interests of every man, woman and child in Florida; and if it had the cooperation of all, and its advice was fully complied with, the results of its work would be still more effective. As it is, the money saved to the people of the State greatly exceeds the cost of the public health work done.

HEALTH NOTES, July, 1899.

HIGHLIGHTS OF PUBLIC HEALTH IN FLORIDA

- 1888 Yellow fever hits Jacksonville and surrounding towns. Lack of a central health authority made evident by the confusion occasioned by quarantine procedures. Surrounding states realizing there is no uniformity in quarantine requirements in Florida levy rigid exclusion rules on Florida citizens. Dr. J. Y. Porter of the then United States Marine and Hospital Service is appointed in full charge of epidemic measures.
- 1889 Florida Legislature in a special session creates the Florida State Board of Health. The Board appoints Dr. J. Y. Porter first State Health Officer in recognition of his excellent qualifications for the position as shown by his management of the 1888 epidemic.
- 1890 Dr. Porter lists yellow fever, smallpox, cholera and hydrophobia as Florida's most dangerous disease enemies. Dengue also mentioned. HEALTH NOTES begins.
- 1905 Last yellow fever epidemic in North America hits Pensacola. Severity and length of epidemic vastly shorter than the 1888 epidemic, because the carrier of the disease, the mosquito, has been identified and the means of prevention discovered. Dr. Porter now lists malaria, tuberculosis, smallpox and diphtheria as Florida's worst disease enemies. Early attempts to collect vital statistics are only partially successful.
- 1910 State Board of Health now has a Bureau of Laboratories with branches at Tampa and Pensacola. A new building, the first complete headquarters for the Florida State Board of Health, is finished in Jacksonville. The State Board of Health inaugurates an extensive campaign against hookworm disease. Malaria, typhoid fever, and smallpox take large toll of lives.
- 1915 Vital Statistics law passed. State Board of Health is now able to begin accurate and extensive collection of statistics. Dr. Porter makes special mention of the need for health education of the people, and an exhibit train to tour the state for this purpose is obtained.

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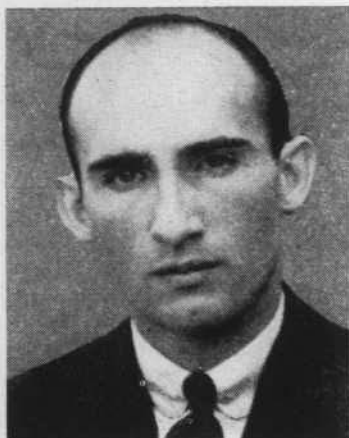
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- 1917 W. H. Cox, M.D., appointed State Health Officer to supersede Dr. J. Y. Porter.
- 1919 Ralph N. Greene, M.D., appointed State Health Officer to supersede Dr. W. H. Cox.
- 1920 Florida is admitted in full standing to the death registration area of the United States. During the preceding five years child health work has received much attention. A Bureau of Sanitary Engineering has been established.
- 1921 Raymond C. Turck, M.D., appointed State Health Officer to supersede Dr. Ralph N. Greene.
- 1925 B. L. Arms, M.D., appointed State Health Officer to supersede Dr. Raymond C. Turck. Florida admitted to the birth registration area in 1924. Maternal mortality listed as one of Florida's scourges.
- 1929 Henry Hanson, M.D., appointed State Health Officer to supersede Dr. B. L. Arms.
- 1930 First full-time County Health Unit established in Taylor County. Hookworm, tuberculosis, venereal diseases, typhoid and malaria highest disease rate. Library established in 1932.
- 1935 W. A. McPhaul, M.D., appointed State Health Officer to supersede Dr. Henry Hanson.
- National Social Security Act passes Congress. It carries appropriations to the states which enable the health departments to expand existing programs to include greater emphasis on local health work, maternal and child health, and adequate training for health personnel.
- 1937 W. A. McPhaul, M.D., reappointed State Health Officer, the first instance since the time of Dr. J. Y. Porter that the State Health Officer had been reappointed for a second term of office.
- 1939 Florida now has seventeen full-time local health units. In the intervening two years the services of the State Board of Health have enlarged to include several new Bureaus, including Venereal Disease Control, Health Education, Local and County Health Work, Tuberculosis Control, Maternal and Child Health, Dental Health. An extension to the State Board of Health Building, long needed, has been completed.

PUBLIC HEALTH IS PURCHASABLE

"Public health is purchasable."

That is a famous quotation and a true one. One that has been proven many times over since the advent of public health work. For, exclusive of abnormal conditions, any community can determine its own morbidity rate, its own death rate. Hence its own prosperity.

A healthy public is purchasable for the price of an adequately manned and adequately equipped official health department.

It is false economy to attempt to do any sort of health work with untrained personnel or to do public health work with an appropriation only sufficient to carry on a limited or sporadic campaign against disease.

Such practice is comparable to an army's having only enough ammunition to get its men to no man's land and no farther. When they arrive at that point with empty guns and no artillery fire to protect them, there is nothing to do but retreat and die. The result is defeat, failure, and the loss of thousands of lives.

No enemy of man is so overpowering as disease. It is more to be feared than war for it strikes the very heart of the nation—its citizens. It spares no one, neither man, woman, child, nor those unborn. It respects no race nor creed nor nationality. It carries on an ever-present fight for supremacy. If man is to survive he must be equally vigilant.

It is not enough for one man to be vigilant, or one small group of men. The combat must be carried on by a trained army of men which, since it cannot hope to out-number the host of disease carriers, must at least be better equipped and more clever in its defense strategy.

Since the average lay person is not trained for such a fight, nor does he have the time and inclination to wage it, the job falls upon the official organization known as public health. These departments are the guardians of our nation's health. And since the foundation of every nation is the health of its people, it is indeed a stewardship to be regarded seriously.

The steward is the public health department, and those who think their support is an extravagance even in the face of the above facts, need only to glance at a few figures estimating the cost of disease in this country:

According to the U. S. Public Health Service, fully \$50,000,000 is spent in taxes in this country every year for the support of public institutions of those incapacitated by one disease alone, syphilis.

For the same group it is estimated that the loss in wage earnings is at least \$158,000,000 per year.

And the stupendous sum of \$2,560,000,000 is the figure which it has been computed represents the money spent on sickness every year by the American public.

If these amounts are being spent for sickness, is it not logical that at least a small fraction of the amount should be set aside for preventing and controlling disease through the operation of efficient public health departments? Adequate sums diverted in this direction will mean a reduction of not only the vast bill now charged against disease but a strengthening of the foundations of prosperity, namely the health of all people.

Such prosperity is purchasable because public health is purchasable. Money spent on such a purchase is economy in the long run.

WATCH THIS MAP

It denotes the progress of County Health work in Florida.
Each white dot stands for a full-time county unit.



MEDICAL OFFICERS

Dist. 1. Marianna	C. W. McDonald, M.D.
Dist. 2. Jacksonville	
Dist. 3. Ocala	D. C. Witt, M.D.
Dist. 4. Bartow	C. W. Pease, M.D.
Dist. 5. West Palm Beach	Leland H. Dame, M.D.

MALARIA RESEARCH

Mark F. Boyd, M.D., Tallahassee

Rockefeller Foundation

ENTOMOLOGY

W. V. King, Ph.D., Orlando

U. S. Bureau Entomology

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HEALTH NOTES

FLORIDA STATE LIBRARY

CANCER . . .

PREVENTION AND CONTROL

W I CASH LIBRARIAN
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Fight Cancer
ENLIST
WOMEN'S FIELD ARMY

The Women's Field Army Against Cancer is a collaboration between the public and the medical profession. Chiefly educational, it seeks to enlist the active cooperation of every man and woman in the community in a volunteer war to save human life.

Under the direction of the State Commander, local groups of the Field Army—known as units—are formed in cities, towns, and counties. These units like the state division headquarters are centers for the spread of information on cancer—on the disease in general and on the local problems relating to it. In every instance the work of these volunteer women leaders is in cooperation with representatives of the state and county medical societies who supervise all the educational activity, making certain that it is sound and valuable.

The Florida Division of the Women's Field Army is beginning its third annual crusade in Florida under the command of Mrs. J. Ralston Wells, Daytona Beach. Its ultimate success will depend on the support the general public will give it during the month of April which has been set aside by special Act of Congress as Cancer Control Month. Both men and women may enroll and the fee in each case is one dollar. Of this, seventy per cent will be returned to Florida to be spent under the direction of the State Executive Committee and thirty cents will be retained by the American Society for the Control of Cancer for its national program.

"Early Cancer is Curable. Fight It with Knowledge." That is the challenging slogan of the Women's Field Army. Let us accept our responsibility in this fight. It will cost us little and it may bring incalculable returns in health and happiness to the whole country.

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Entered as Second Class Matter, Oct. 27, 1921, at the Postoffice at Jacksonville, Fla., Under the Act of Aug. 24, 1912

VOL. 31

MARCH, 1939

No. 3

ATTACKING THE PROBLEM

W. A. McPHAUL, M. D., *State Health Officer*

Once again the State Board of Health dedicates this issue of *Health Notes* to the praiseworthy efforts of the women's Field Army Against Cancer.

One of the greatest hindrances to the final defeat of many of the diseases which attack humanity has been superstition—the belief that disease was a visitation of evil spirits, a punishment from unkind Nature.

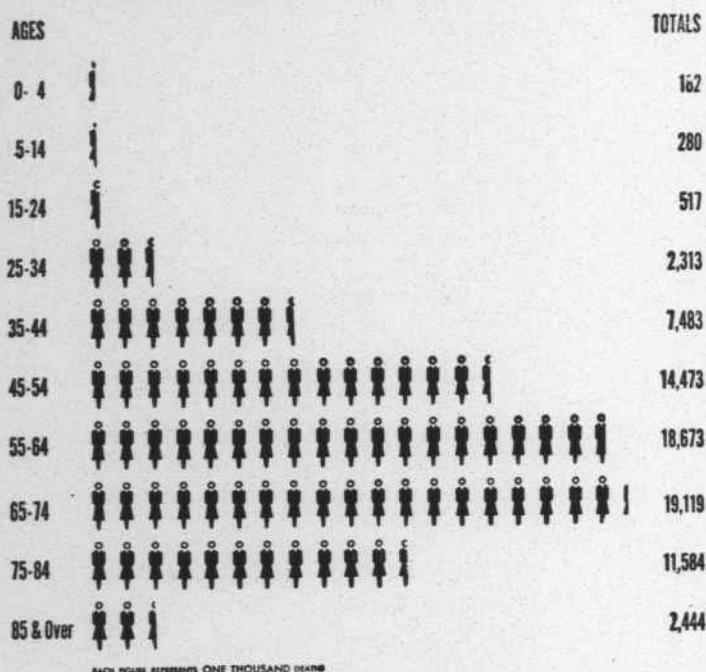
As Medicine has progressed, man has lost much of his fear of disease. It has been proved over and over again that disease can be mastered. Think of plague, smallpox, typhoid, rabies, diphtheria. We no longer bow our heads in submission to any disease, but fight it with knowledge and skill. Science continues to search

and find the reasons behind disease conditions and their remedy.

Cancer has seemed to elude the search for its cause for many years, and yet in the present day we know a great many things about it. The most important thing for everyone to know is that the early discovery of the existence of cancer is the strongest weapon against it.

An enlightened public opinion can do much to bring early cancer cases to diagnosis and treatment. The work of the Womens' Field Army Against Cancer is a humanitarian service. Their work carries on through the entire year, with the month of April high-lighted to bring forcible reminder of the need for keeping continually alert to this great public health problem.

CANCER DEATHS IN WOMEN BY AGES



AMERICAN SOCIETY FOR THE CONTROL OF CANCER

The dangerous cancer years for women are those over thirty-five. In 1936—the last year for which figures are available—the United States Census Bureau reports that 77,069 women died of this disease. Of these, 73,776 were over 35 years of age. Approximately one out of seven women of thirty-five or over will die of this disease, if the present rates continue.

The death rate is particularly high in women between the ages of thirty-five and sixty-four. In this group, one out of every five deaths in 1936 was due to cancer. Of the 40,629 women between thirty-five and sixty-four who died from this disease nearly one-half—19,100—had cancer in the breast or in the uterus.

This appalling death rate can and must be sharply reduced. While cancer in the breast and uterus causes the death of many thousands, it is curable in 80 per cent of the cases, when it is diagnosed and treated in its early stages. Single lumps in the breast and unexplained or irregular bleeding or discharge from any of the body openings should always be investigated immediately by a competent physician. Every woman over thirty-five should have at least one complete physical examination each year, an examination that will include the breast and uterus.

CANCER

J. N. PATTERSON, M. S., M. D., *Director Bureau of Laboratories*
Florida State Board of Health

A true tumor, technically called a neoplasm, may be defined as a more or less circumscribed growth of new cells which multiply without control and which serves no useful purpose. Ordinary cellular growth is controlled and serves a useful purpose. There are some 17 types of cells within the body and a cell of any of these types may give rise to a neoplasm. A true tumor or neoplasm results from a cell or a group of cells becoming mutinous and acting as outlaws or bandits within the body of the individual so affected. These cells continue to divide without control, usurp nutrition from the normal cells, and in general act as a parasite to the host.

As a rule it is easy to divide neoplasm into two great classes: the one innocent or benign; the other dangerous or malignant. A benign tumor tends to remain localized, enlarges by central growth and is not dangerous to life unless by pressure upon a vital structure. On the other hand a malignant tumor usually does not remain localized, enlarges peripherally sending out finger-like processes into the surrounding tissues and will kill the host in time if let alone. In addition to infiltrating the surrounding normal tissues, cancer cells grow into blood vessels or lymphatic vessels and are carried by the circulation to other parts of the body and set up distinct secondary tumor nodules. The processes by

which tumor cells are transported in this manner to distant parts of the body is called metastasis and the resulting secondary tumor nodules are spoken of as metastatic tumor nodules. A malignant tumor will always cause death in time unless it can be completely removed by surgical means or all tumor cells killed by radium or deep x-ray therapy.

The word cancer is usually used in a general sense to designate any malignant tumor no matter what its origin. The word cancer means crab-like, and malignant tumors were given this name because of their characteristic of sending out crab-like processes into the surrounding normal tissue. There are many different kinds of cancer, the commonest and best known of which is the carcinoma. The term carcinoma is used in a restricted sense to designate a malignant tumor of epithelial origin, as those arising from the epithelial cells of the skin, lining of all tracts opening to the outside, and from any of the glands of the body. The term sarcoma is used in two senses, restricted and general. In its restricted sense it is used to designate any malignant tumor arising from the four connective tissues of the body; namely, ordinary connective tissue, bone, cartilage, and myxomatous tissue. However, it is more often used in the general sense to designate any malignant tumor of non-epithelial origin.

Therefore, if we use the term sarcoma in the general sense any malignant tumor can be classified either as a sarcoma or a carcinoma. This is the preferred usage.

The question is often asked as to just how cancer kills the host. This is a difficult question to answer since it is dependent upon so many factors such as location of the tumor, presence or absence of secondary infection, type of tumor, etc. However, in general it may be said that cancer causes death in the individual by general disturbance of metabolism (the energy yielding process essential to life) commonly referred to as cachexia or extreme emaciation. There is usually an accompanying marked loss of strength, anemia, digestive disturbances and toxemia due to superimposed infection or to toxic substances formed by the breakdown of the tumor itself. Cancerous tissue because of its very rapid growth frequently outstrips its blood supply and local death of a portion of tissue occurs from the inadequate circulation. This results in absorption of this toxic material into the blood stream, producing a generalized toxic condition similar to that produced by a severe infection. Marked emaciation occurs very early when a tumor obstructs the esophagus or the lower end of the stomach because of the resulting obstruction to the passage of food along the gastro-intestinal tract. An ulcerating tumor frequently causes anemia early by actual loss of blood by hemorrhage. If a large vessel is

eroded the hemorrhage may be large enough to produce death within a few minutes from the rapid loss of blood. Malignant tumors are particularly susceptible to secondary infection because of portions of the tumor having a relatively poor blood supply which lowers their resistance to infection. Infection is common too, due to the fact that the tumor frequently ulcerates on a surface where many bacteria are present. Any infection of tumorous tissue adds to the general toxemia, thus causing further cachexia.

The ideal classification of neoplasms would be one on an etiologic basis but since their cause or causes are unknown this cannot be done. The best classification and the one most commonly used is on a histologic or type cell basis. In other words, we now classify tumors as to the type of cell that has become neoplastic. However, it is frequently impossible, especially in rapidly growing malignant tumors, to identify the type of cell so in that case we bring into use our knowledge of embryology (the study of the development of the individual from the fertilized egg to birth). In this manner we help to identify the type cell by taking into consideration the types of cells found in prenatal and postnatal life in the area in which the tumor arose. In medical parlance we can say the best method of tumor classification available at the present time is the histologic classification with a histogenetic modification.

Cancer is a universal disease af-

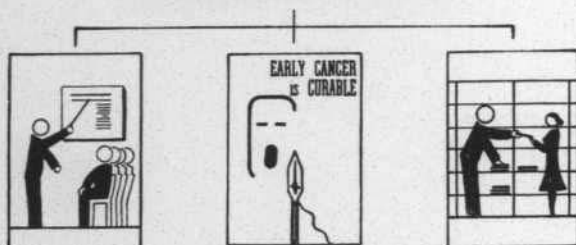
fecting man, animals and plants. It is mentioned in the earliest writings of man. Although cancer is occasionally found in very early life, even in infancy, it is primarily a disease of adult life occurring chiefly after 40 years of age. From the standpoint of the individual the liability to death by cancer steadily increases as one grows older. It is estimated that over 100,000 persons die of cancer annually in the United States. There is a definite increase in the number of reported deaths from cancer. Part of this increase is due to better diagnosis and part due to an actual increase in the disease. Industrial hazards as for example, the inhalation of gas fumes is thought to be responsible for part of the increase.

The incidence of cancer is higher in women than in men because of its frequent occurrence in the female breast and the womb. It is particularly liable to occur in the neck or cervix of the womb of women who have borne children and who have had a tear of the cervix that has not been properly repaired. Ninety per cent of cancers of the womb occur in the cervix and 96 per cent of these have had a tear of the cervix. A cervical tear that has not been properly repaired usually becomes secondarily infected thus producing a chronic source of irritation. Any women, and particularly those in the cancer age, should have a thorough physical examination if a discharge and particularly a bloody discharge should develop. A lump in the breast should be examined by a physician. Any unusual gastro-intestinal symptoms in a middle aged or older person should be thorough-

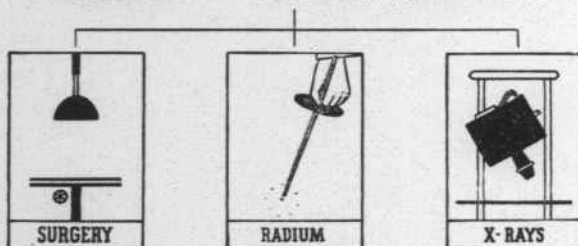
ly investigated particularly if that patient had not been troubled by similar symptoms previously.

Although the nature of cancer is not fully understood at present there is a large amount of practical knowledge available concerning its causation, course in the body, prevention and cure. It is preventable and curable to some extent. Practically all authorities agree that it is not a germ-borne disease and it is not contagious, so that no one need fear the danger of contracting cancer by being around or actually taking care of a cancer patient. Chronic irritation whether it be from infection or mechanical trauma is apparently the most common and dangerous inciting factor in producing cancer. Therefore in prevention of cancer the most important factor is to prevent chronic irritation. There is a definite inheritance of susceptibility to cancer over which we have no control but we do have definite means of preventing the inciting factor of chronic irritation in most cases. If all persons in the cancer age would have a thorough physical examination yearly and see a doctor at once when any unusual symptoms, discharges, or lumps occur early diagnosis would be possible and many lives spared. There is no treatment for cancer other than complete surgical removal or irradiation by deep x-ray therapy or by radium. The earlier the diagnosis the better the chance for complete cure by one or the other of these means. Above all avoid treatment by any one but a competent and well trained physician.

CANCER CAN BE CONTROLLED *by* **EDUCATION**



leading to **EARLY TREATMENT**



WOMEN'S FIELD ARMY AGAINST CANCER

AMERICAN SOCIETY FOR THE CONTROL OF CANCER

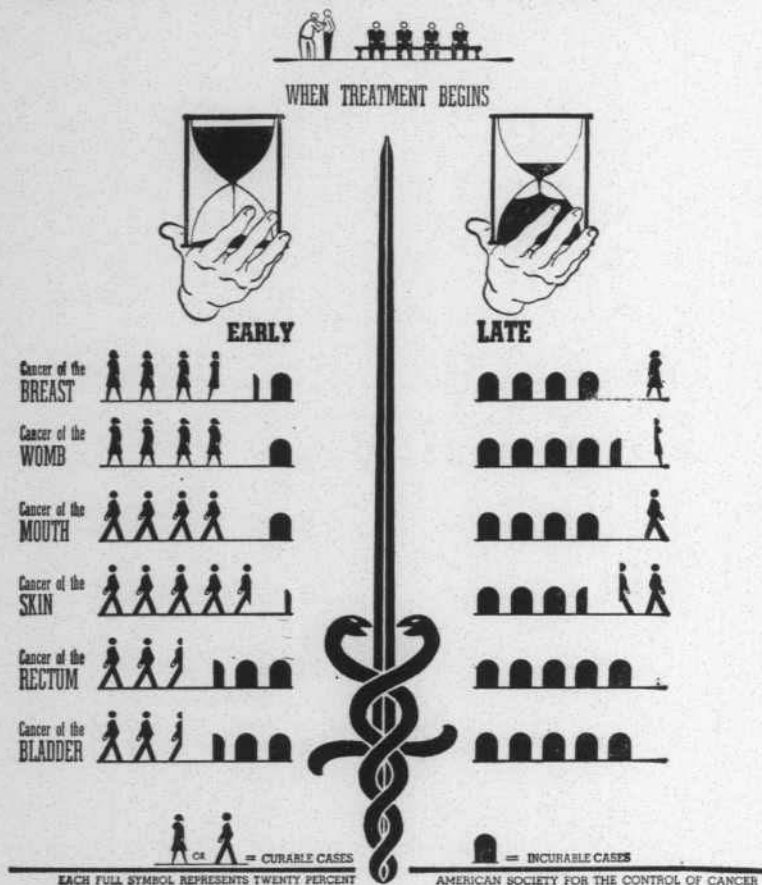
Education and the three accepted methods of treating cancer—surgery, radium, x-rays—give society the power to save thousands of persons who would otherwise be destroyed by this malignant disease. Of these four methods, the last three are curative weapons and are useful chiefly on the early cancer cases. To fight delay and bring the patient to a physician or clinic when his cancer is still local and curable, is the task of education. Without education, the other three weapons are useless indeed. Where education has received popular support, its record of achievement has been great.

The techniques of treating cancer have been developed to a high degree of efficiency, but they must be applied to the disease when it is still a local condition. Most cases of late cancer are beyond cure. In other words the three curing weapons in the war on this disease depend for their success on education bringing patients to physicians and clinics in time for early diagnosis and treatment. Education clears the way for cures by radium, x-rays, and surgery.

It is estimated by the American Society for the Control of Cancer that there are in the United States today, 150,000 persons with early cancer, cancer early enough to be cured entirely if it is diagnosed and treated promptly.

The Women's Field Army Against Cancer is now conducting a nation-wide campaign of education under the slogan "*Early cancer is curable. Fight it with knowledge.*" Congress, recognizing the importance of education, has set aside April as Cancer Control Month. This is the only disease against which Congress has taken such action. Progress in reducing cancer mortality depends at the present time on the support the public gives to such movements as the Women's Field Army Against Cancer.

EARLY is the Watchword in Cancer Control



Delay may be fatal in cancer. This chart shows the importance of starting treatment as soon as cancer develops. Time with its hourglass is not the friend of the person who has this malignant disease. As time passes and sand runs through the glass, the hope for recovery fades. Cancer is curable but it must be diagnosed and treated by x-rays, radium, or surgery in its early stages.

This chart tells its own story: when cancer of the breast is treated in its early stages, 75 per cent of the cases are cured; in late cases only 20 per cent; in cancer of the womb, the figures are 80 per cent curable in early cancer, only 10 per cent in late; in cancer of the mouth, 80 per cent as against 20 per cent; in cancer of the skin, 95 per cent as against 30 per cent; in cancer of the rectum and the bladder, 50 per cent will be cured in early cases, few if any in late cases. In 1936, 49,463 persons died of the disease in these sites; more than 36,000 of them could have been saved by early diagnosis and prompt treatment.

LISTEN IN

The following network broadcasts on cancer have been scheduled and will be presented during the month of April. These broadcasts on which several noted speakers will talk, are especially designed to emphasize the hopeful aspects of cancer.

April 3—7:45-8:00 p. m., EST, Red Network of the National Broadcasting Company: "Protect Your Best Years." Speakers: Bishop Henry St. George Tucker, Presiding Bishop, Protestant Episcopal Church; Thomas Parran, Jr., Surgeon-General of the U. S. Public Health Service; and Dr. C. C. Little.

April 12—5:00-5:15 p. m., EST, Blue Network of the National Broadcasting Company: "Civilization Against Cancer." Dr. Eduard Lindeman, Professor of Social Philosophy at the New York School of Social Work; Professor Henry Pratt

Fairchild, Professor of Sociology at New York University, and Dr. C. C. Little.

April 18—4:00-4:15 p. m., EST, "Highways to Health," Columbia Broadcasting System: "Cancer Research." Dr. Stanley P. Reimann, Director of Lankenau Institute in Philadelphia, and Dr. Little.

April 25—4:00-4:15 p. m., EST, "Highways to Health" program, Columbia Broadcasting System. "The Cured Cancer Club" with Dr. Anna C. Palmer, President; Dr. Frank E. Adair, Secretary of the American Society for the Control of Cancer, and others.

Progress under the National Cancer Act was described as "phenomenal" by Thomas Parran, Surgeon General of the Public Health Service, at the January meeting of the National Advisory Cancer Council.

A nation-wide program of education will be launched to acquaint the public with the dangers of cancer and means for its prevention. A new folder will be issued shortly to educate the public to the advantages of early treatment.

During the 17 months that the Cancer Act has been operating, 82 applications for grants-in-aid have been received by the Council. Sixteen of these requests, totaling \$116,000 have been approved. Twenty-two young physicians are receiving special training in diagnosis and treatment at approved cancer cen-

ters. Fifteen research fellowships have been granted for work on projects undertaken by the Cancer Institute and private research centers. Nine and one-half grams of radium have been bought and delivered to the Bureau of Standards for testing before the supply is distributed for use to hospitals and cancer clinics throughout the country. One gram will be retained for the Institute's own work. Six states have enacted cancer control programs and others are considering such legislation. Five field investigations are under way. These include surveys to determine the relative effectiveness of different forms of treatment, mortality statistics by locality with recommendations for reporting forms, and an investigation of the folklore of cancer causes as expressed both by lay people and physicians.*

**The Health Officer*, February, 1939.

TAKING THE FEAR OUT OF CANCER

There are many different methods employed today by medical science for the control of disease. The contagious diseases are controlled by quarantine; and constitutional diseases by diet and hygiene. Certain of the infectious diseases are controlled by specific diagnostic and curative methods, such as vaccines and antitoxins. For the control of cancer, none of these methods is effective, because cancer is not contagious and is not due to any specific organism, thus there is no vaccine or antitoxin available to indicate that cancer is present or to use as a remedial agent.

However, the prevention of cancer is made possible by the fact that many, if not most, of the more common forms of cancer arise, not in normal tissues, but in parts of the body which have long been the site of one or another form of chronic irritation. Such sites of chronic irritation can often be recognized and corrected or removed long before they become cancerous. In this way cancer is prevented just as definitely as typhoid fever is prevented by vaccination.

When there is reason for suspecting that the disease has occurred, we do not need today to remain in doubt. By well-established tests and through long experience with thousands of cases of every type, we are able to say with certainty whether a suspicious growth is benign and harmless, or cancer.

If the disease is present, then the correct procedure is clearly indicated. We have learned that surgery, x-ray, and radium offer the most hopeful methods of treatment. There is available to every physician and surgeon the best known facilities for the treatment of cancer.

It is well known that all growths are not cancer, although they may seem to be so to the layman whose fears may have been aroused by the false advice of quacks. In any event the safest course is to find out immediately by seeing your physician, or attending an established and recognized cancer clinic in your community.

Many cases of cancer first seek competent surgical advice only when the disease is far advanced. Nevertheless, in a well-organized clinic in the past three years more than 1,000 advanced cases have been treated with definite arrestment in more than 800 cases. This and the reports from many of such clinics warrant us in saying that advanced cancer is an arrestable disease.

In the early stages the cure of cancer rests largely with the individual. Prompt and adequate medical attention is the very best insurance for cure, or against spread of the disease. The medical profession has long preached the gospel of early treatment, but in spite of this, thousands have died through delay, or recourse to quacks, or self-medication.

You as a responsible individual should know that cancer may occur at any age but that most of the cases occur after the twentieth year and it is more frequently met with after the age of forty.

You should know that the presence in your home of a patient with cancer does not subject the other members of the family to the slightest risk of contracting the disease, as it is neither contagious, as are measles and scarlet fever, nor is it infectious as typhoid fever.

Cancer is a disease, personal to the individual who has it, and can-

not be transmitted in any known way to another person.

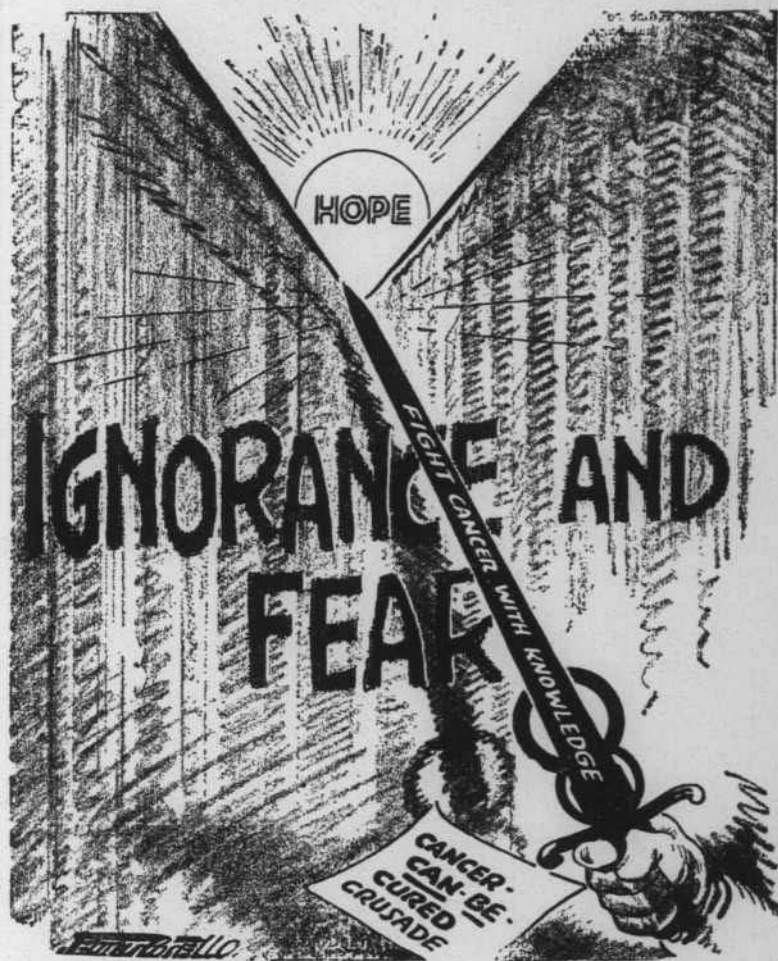
Why is there so much pessimism and fear about cancer and why is this attitude wrong?

Largely because until recent years, an early diagnosis of cancer was rarely made and the disease was usually so far advanced before the patient sought treatment that nearly

all patients died of the disease. This in consequence led to two erroneous impressions: first, that a diagnosis of cancer was a death warrant, and second, that anyone who survived or recovered from the disease couldn't possibly have had cancer.

If you develop cancer, the possibility of being cured depends largely upon your own intelligent observation of yourself.

CUTTING THE VEIL



— Jerry Costello in The Knickerbocker News

REPORT OF THE TENTH ANNUAL MEETING OF THE FLORIDA PUBLIC HEALTH ASSOCIATION

EDWARD M. L'ENGLE, M. D., *Secretary-Treasurer*

The tenth annual meeting of the Florida Public Health Association was held in Hollywood, November 28, 29 and 30, 1938. The program was very interesting and the attendance was the largest in the history of the Association.

The following officers were elected:

S. D. MACREADY, *President*

A. P. BLACK, *First Vice-President*

ELIZABETH REED, *Second Vice-President*

EDWARD M. L'ENGLE, M.D., *Secretary-Treas.*

These officers with the following constitute the Board of Directors:

P. A. SCUDDER

MRS. ELIZABETH BOHNENBERGER

W. A. MCPHAUL, M.D.

C. W. PEASE, M.D.

KATHERINE CORBIN

N. A. UPCHURCH, M.D.

Doctor N. A. Upchurch of Jacksonville was selected as the representative on the Governing Council of the American Public Health Association.

Thirty-three new members were enrolled and eight old members reinstated, bringing the total membership of the Association to 234. Of the old members, 115 are active members and 86 associate members. Sixty-five of the active members are also members of the American Public Health Association, which maintains our standing as an affiliated society.

Among the resolutions passed by the Association at the Hollywood convention, the following would appear to be of sufficient public interest to warrant their publication in HEALTH NOTES.

RESOLUTION BY FLORIDA PUBLIC HEALTH ASSOCIATION, INC.

RESOLVED, That the Florida Public Health Association considers properly pasteurized milk the safest milk for human consumption and advises the use of pasteurized milk in dairy manufacturers, especially in ice cream mix, and it urges all state, county and municipal health officers to recommend its use to the public.

Unanimously adopted by a vote of the entire membership assembled this 30th day of November, 1938, Hollywood, Fla.

S. D. MACREADY, *President*

EDWARD M. L'ENGLE, M. D., *Secretary*

RESOLUTION BY FLORIDA PUBLIC HEALTH ASSOCIATION, INC.

RESOLVED, That the Florida Public Health Association is impressed with the importance of the program of the State Board of Health in investigating stream pollution in Florida and that the Association considers it a problem of prime importance because of the necessity of conserving our water supply and protecting fish life of the state.

Unanimously adopted by a vote of the entire membership assembled this 30th day of November, 1938, Hollywood, Fla.

S. D. MACREADY, *President*

EDWARD M. L'ENGLE, M. D., *Secretary*

RESOLUTION BY FLORIDA PUBLIC HEALTH ASSOCIATION, INC.

RESOLVED, That the Florida Public Health Association is in hearty sympathy with the Surgeon General of the United States Public Health Service in the control of syphilis and other venereal diseases and notes with satisfaction the intention of the State Board of Health to cooperate fully in the control of these diseases which are a menace to the American home and too long have been ignored and treated as unfit for free public discussion. The Association believes that the public should be fully informed and that the policy of concealment is wrong and should be discouraged.

Unanimously adopted by a vote of the entire membership assembled this 30th day of November, 1938, Hollywood, Fla.

S. D. MACREADY, *President*

EDWARD M. L'ENGLE, M. D., *Secretary*

RESOLUTION BY FLORIDA PUBLIC HEALTH ASSOCIATION, INC.

RESOLVED, That the Florida Public Health Association has heard with interest and approval of the work being done by the Broward and Dade Counties Mosquito Commission and the State Board of Health to reduce to a minimum infestation of these counties with the mosquito *Aedes Egypti* to the end that the state and the South may be fully protected from yellow fever which might possibly be introduced through the agency of the airplane.

Unanimously adopted by a vote of the entire membership assembled this 30th day of November, 1938, Hollywood, Fla.

S. D. MACREADY, *President*

EDWARD M. L'ENGLE, M. D., *Secretary*

RESOLUTION BY FLORIDA PUBLIC HEALTH ASSOCIATION, INC.

RESOLVED, That the Florida Public Health Association commends the Pan-American Airways for the development and practical application of measures to fully protect the water and food supplies served its passengers and personnel.

RESOLVED FURTHER, That the Association thanks the chief steward of the company for presenting the subject to the Association. It believes that this is the first time that the matter of handling milk and food in airplane travel has been presented to the public health body.

Unanimously adopted by a vote of the entire membership assembled this 30th day of November, 1938, Hollywood, Fla.

S. D. MACREADY, *President*

EDWARD M. L'ENGLE, M. D., *Secretary*

RESOLUTION BY FLORIDA PUBLIC HEALTH ASSOCIATION, INC.

RESOLVED, That the Florida Public Health Association congratulates the State Board of Health on the completion of its new building in Jacksonville and the Association sincerely hopes that this forward step by the State of Florida will prove an incentive to municipalities to properly house their health departments which are at the present time generally provided with inadequate quarters with the result they are greatly handicapped in carrying on their work economically and efficiently.

Unanimously adopted by a vote of the entire membership assembled this 30th day of November, 1938, Hollywood, Fla.

S. D. MACREADY, *President*

EDWARD M. L'ENGLE, M. D., *Secretary*

RESOLUTION BY FLORIDA PUBLIC HEALTH ASSOCIATION, INC.

RESOLVED, That the Florida Public Health Association goes on record as advising the passage of a new State Food and Drug Law at the next session of the legislature to enable the State to take full advantage of the provisions of the new Federal Food, Drug and Cosmetics Act.

Unanimously adopted by a vote of the entire membership assembled this 30th day of November, 1938, Hollywood, Fla.

S. D. MACREADY, *President*

EDWARD M. L'ENGLE, M. D., *Secretary*

WATCH THIS MAP

It denotes the progress of County Health work in Florida.
Each white dot stands for a full-time county unit.



MEDICAL OFFICERS

Dist. 1. Marianna.....	C. W. McDonald, M.D.
Dist. 2. Jacksonville.....	
Dist. 3. Ocala.....	D. C. Witt, M.D.
Dist. 4. Bartow.....	C. W. Pease, M.D.
Dist. 5. West Palm Beach.....	Leland H. Dame, M.D.

MALARIA RESEARCH

Mark F. Boyd, M.D., Tallahassee.....Rockefeller Foundation

ENTOMOLOGY

W. V. King, Ph.D., Orlando.....U. S. Bureau Entomology

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HEALTH NOTES

HOOKWORM DISEASE

White People Are Hardest Hit

Schools Hold Key Spot

Control Depends On Sanitation

Local Health Service Plays Its Part

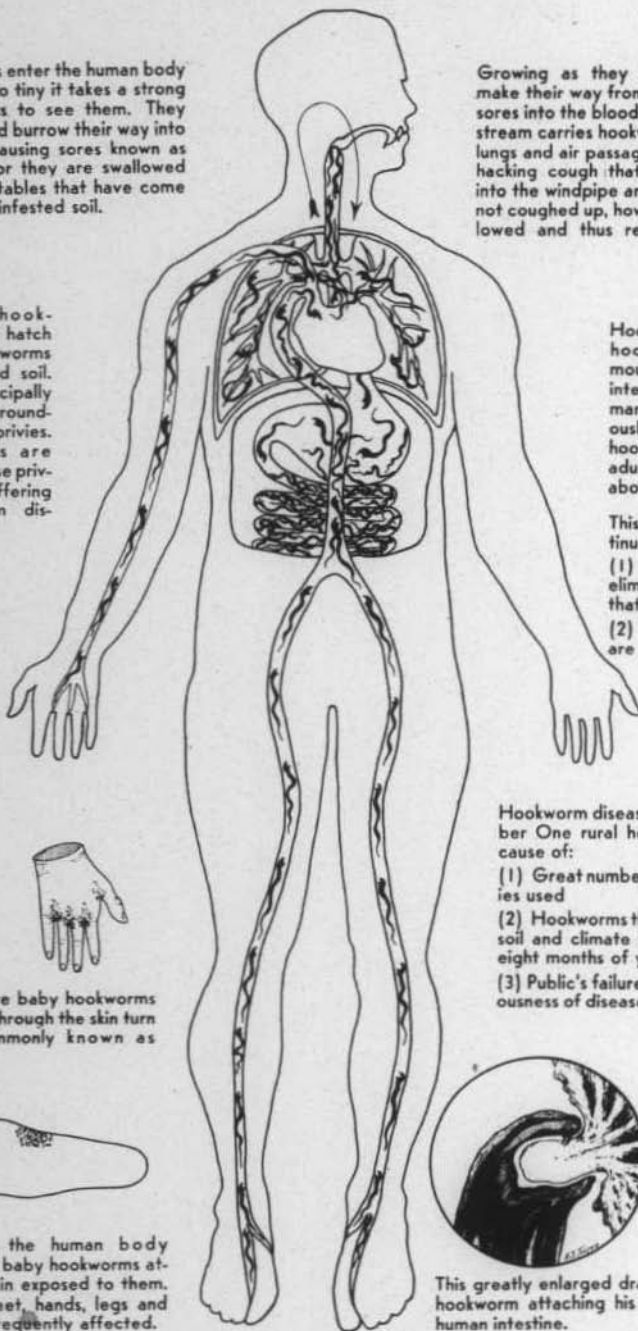


Beginning new monthly feature: BOOK REVIEWS

THIS MAN HAS HOOKWORMS

Baby hookworms enter the human body when they are so tiny it takes a strong magnifying glass to see them. They either pierce and burrow their way into the bare skin causing sores known as "ground itch," or they are swallowed with leafy vegetables that have come in contact with infested soil.

Soil harboring hookworm eggs that hatch into baby hookworms is called infested soil. It is found principally beneath and surrounding insanitary privies. Hookworm eggs are deposited in these privies by people suffering with hookworm disease.



Growing as they travel, hookworms make their way from the "ground itch" sores into the bloodstream. The bloodstream carries hookworms to the heart, lungs and air passages, often causing a hacking cough that sends the worms into the windpipe and throat. They are not coughed up, however, but are swallowed and thus reach the stomach.

Hookworms attach the hooks inside their mouths to the human intestine, sucking human blood continuously. In the intestines, hookworms grow to adult worms that lay about 9,000 eggs daily.

This vicious circle continues until:

- (1) Hookworms are eliminated by medicine that purges.
- (2) Sanitary privies are used.

Hookworm disease is Florida's Number One rural health problem because of:

- (1) Great number of insanitary privies used
- (2) Hookworms thrive best in kind of soil and climate that prevails here, eight months of year
- (3) Public's failure to recognize seriousness of disease.



The places where baby hookworms enter the body through the skin turn into sores, commonly known as "ground itch."



When entering the human body through the skin, baby hookworms attack any bare skin exposed to them. However, the feet, hands, legs and arms are most frequently affected.



This greatly enlarged drawing shows a hookworm attaching his hooks to the human intestine.

Let's Rid Florida of Hookworm Disease!

FLORIDA HEALTH NOTES

Volume 31

Number 4

April

1939

Entered as Second Class Matter, Oct. 27, 1921, at postoffice, Jacksonville, Fla., Act of Aug. 24, 1912

HOOKWORM DISEASE IS GRAVE FLORIDA PROBLEM

W. A. McPHAUL, M.D.

Dr. McPhaul, Florida State Health Officer, says hookworm disease is undermining economic structure of state and calls upon public to assume responsibility of eradication.

EVERY parent, business man, club woman, school teacher, civic leader and minister in Florida should be vitally interested in this issue of HEALTH NOTES because it turns the spotlight full force on a gigantic thief who has been robbing and plundering for years — HOOKWORM DISEASE. And since hookworm disease robs both health and pocketbook, it is truly undermining the entire economic structure of our people.

A careful, accurate survey of the intensity of hookworm infestation in the state has just been completed. So serious were the conditions found that the Florida State Board of Health deemed it their duty to the people of Florida for whom they work to devote an entire issue of HEALTH NOTES to the problem.

In the pages that follow, the story of Hookworm Disease is told: —the results of the recent survey, the reason for its high prevalence in this state, why it has been allowed to gain such a

foothold, how it is more frequent among white people than colored.

When one-third of our Florida citizens are known to have hookworm, when some counties show that as high as 70 per cent of the entire population are suffering with hookworm disease, when many schools show more than half their students infested with hookworms and some schools almost 100 per cent infestation, then it ceases to be an individual or pencil-and-paper problem and becomes a community responsibility of utmost importance.

The only encouraging sign in the whole lamentable situation is the ease and quickness with which hookworm disease can be eradicated. It requires only (1) Public awakening to the seriousness of the problem (2) An intensive campaign of sewage sanitation.

An appeal is herewith made to the people of Florida, "Let's rid Florida of hookworm disease."

LOCAL HEALTH SERVICE PLAYS IMPORTANT PART

D. C. PARMENTER, M.D.

Success of any disease prevention campaign depends on how well the county health officer knows his community, says Dr. Parmenter, director of Franklin-Gulf County Health Unit.

THE question of the prevention of any disease — whether hookworm or one of the other communicable diseases—boils down to the proposition of how well the county health officer knows his people and his community. Next to the family physician the county health department is the closest unit in any community to the people who make up that community.

The county health officer's primary concern is not the treatment of disease but rather how, where and why it occurs. Armed with this information, plus the confidence of his community, he seeks to prevent the disease.

In hookworm eradication the county health officer must be something of a climatologist, sanitarian and economist. He must know the temperature range, the average amount of rain-

fall, the kind of soil in the various areas of his county, the sanitary habits of the people and their economic status.

In general it can be said that the temperature range in Florida is favorable to hookworm disease. The mean annual rainfall in the state is from 54 to 59 inches, which is sufficient moisture for the development of hookworm larvae.

Most soils in Florida are also favorable to hookworm larvae, as

it is known that the sandy soils which predominate in most counties make a favorable medium for larvae growth. Of course, counties will vary according to location and the local health officer should familiarize himself with these variations.

We will assume, for any given anti-hookworm campaign, that the county health officer has



Both these boys are 16 years old. Hookworm disease stunted the smaller one's growth.

made a survey of the school children, particularly rural schools, to determine the number of cases in that group of the community. He begins with the schools because hookworm disease is primarily a disease of school age, since it has been shown that symptoms of the disease are rare before the fourth or fifth year and that the severity is cumulative and progressive up to the fourteenth or fifteenth year. That is why the school age group should be the spearhead of the attack.

Each case, as far as possible, should be followed from the school to the home, where usually two or three more cases will be found. While treatment is helpful and in some cases dramatic, it is only an accessory factor.

After all, the main features of any hookworm campaign are sanitation and education. We want (1) Sanitation to prevent soil pollution (2) Treatment to diminish the disease (3) Mechanical protection, such as the wearing of shoes.

The prevention of soil pollution is essential and, if ideally carried out, would stop the disease. But this is difficult. It requires not only the building of privies but insistence on their use. It should be remembered, also, that burial of feces is not very effective, as the larvae can get up through three to four feet of soil.

Of course, the wearing of shoes would eliminate most of the possibility of infection but here again

one runs into difficulties. In a large majority of cases there are not only many who cannot afford shoes but some who can afford them yet will not wear them.

The need for an educational program in any campaign of disease prevention is self-evident. But each health officer has to plan the program in the way best suited to his particular county, as all cannot be approached in the same manner. I believe that the

FLORIDIANS OFFERED FREE AID

The Florida State Board of Health offers the people of Florida the following free services to assist them in wiping out hookworm disease:

Free hookworm medicine for all patients of all doctors in Florida.

Free specifications for building sanitary privies or sanitating old privies where possible.

Free personal supervision of the construction of sanitary privies.

Free labor, through WPA Community Sanitation projects, to construct sanitary privies in those counties promoting adequate anti-hookworm campaigns.

Free laboratory examination of specimens to determine whether or not a person has hookworm disease.

individual county unit can solve its own problem better than any group can.

The prevention of hookworm disease, like every other successful disease prevention campaign, is dependent upon full coordination of: education, publicity, and cooperation with local physicians, county officials, the community and its various agencies.

Most of us know whether or not our county soil, temperature and rainfall are all favorable to hookworm. We know what to do to treat it. We know the age group most susceptible. We have access to that age group. We are assigned to units of population which we can contact personally and intimately. Let's try to do something about it.

SURVEY SHOWS HOOKWORMS HIT WHITE RACE HARDEST

J. N. PATTERSON, M.D.

Abstract of 1937-38 investigation by Vanderbilt University, Florida State Board of Health and Rockefeller Foundation is tersely presented by Dr. Patterson, director state laboratories.

THE Florida State Board of Health cooperated with the International Health Division of the Rockefeller Foundation and Vanderbilt University in an investigation concerning the prevalence, distribution and intensity of infestation of hookworm disease in rural white and negro population in Florida during 1937 and 1938. Findings of the investigation were reported in the January 1939 issue of *The American Journal of Hygiene*.*

The purpose of this state-wide investigation was to determine the public health importance of hookworm infestation. Nearly 30,000 white people were examined for hookworm and over 10,000 were found to be positive for a percentage of approximately 35 percent. Over 4,000 Negroes were examined and a little over 800 were positive for a percentage of approximately 20 per cent.

In other words Negroes have a little over one half of the prevalence rate found in white persons from the same areas. Also the average number of hookworms in an infested person is approximately three times greater in the white than in the Negro race. From these facts it is evident that

hookworm in Negroes does not constitute such an important health problem as in the white race.

It was found that the incidence of hookworm was nearly 50 per cent in western Florida; 38 per cent in the northeastern section; 25 per cent in the central portion and 23 per cent in the southern counties.

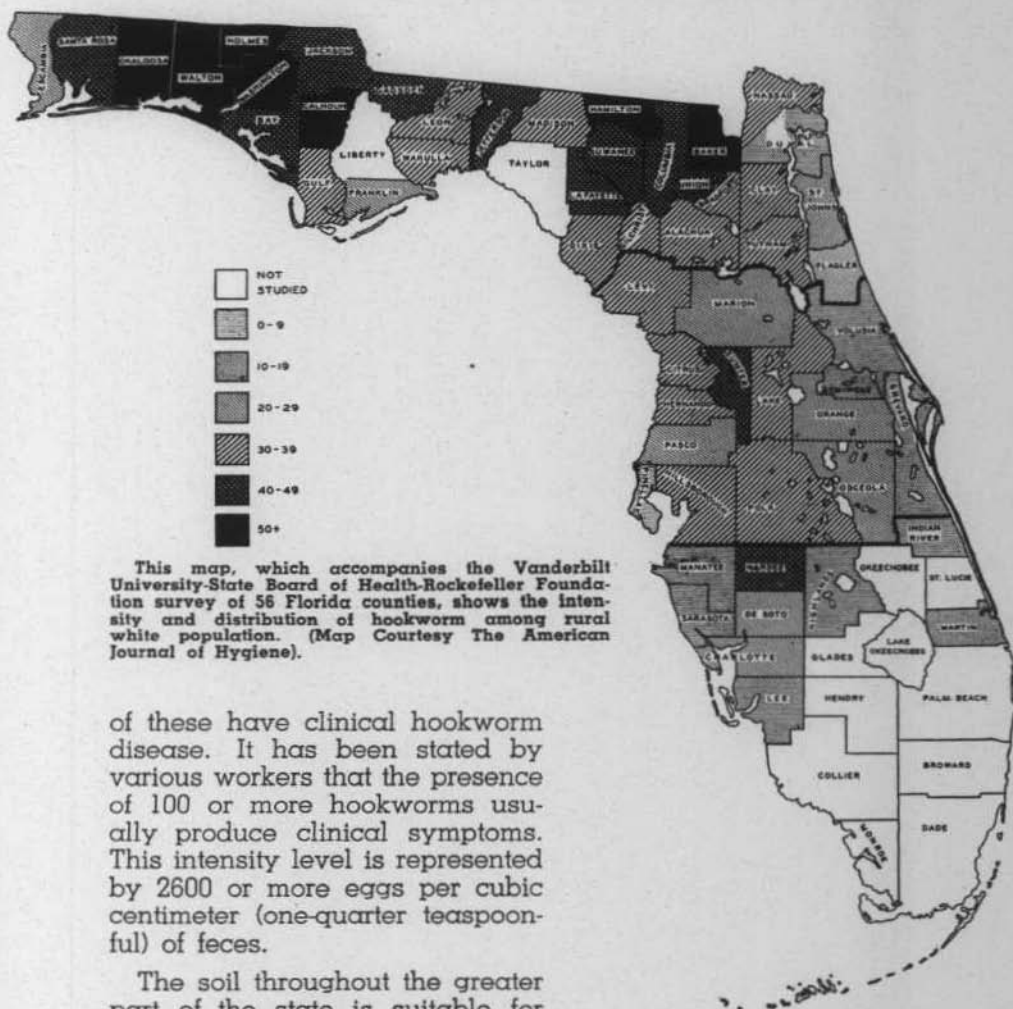
The highest incidence according to age groups was found in school children approximately 45 per cent in the age period of 15 to 19 years. The age incidence in the adult group was about one half of that in children.

Specimens of feces were obtained from nearly 7000 household groups or families in which two or more persons were examined. Of that number over 4000 (nearly 60%) had one or more members infested with hookworm.

It has been demonstrated that as the number of infested persons per family increased, the average number of worms per person also increased. This results both from an increase in soil pollution and from the creation of additional foci of hookworm larvae in the environment.

From their study these investigators estimate that over 140,000 white persons are infested with hookworm and that over 50,000

*Reprints of survey written by W. S. Leathers, M.D., A. E. Keller, M.D. and W. A. McPhaul, M.D. available from Bureau of Health Education, State Board of Health, Jacksonville



This map, which accompanies the Vanderbilt University-State Board of Health-Rockefeller Foundation survey of 56 Florida counties, shows the intensity and distribution of hookworm among rural white population. (Map Courtesy The American Journal of Hygiene).

of these have clinical hookworm disease. It has been stated by various workers that the presence of 100 or more hookworms usually produce clinical symptoms. This intensity level is represented by 2600 or more eggs per cubic centimeter (one-quarter teaspoonful) of feces.

The soil throughout the greater part of the state is suitable for the development of hookworm larvae. The temperature in the southern part of Florida is favorable to the development of hookworm larvae throughout practically the entire year whereas in northern Florida the temperature is favorable for development during only 8 months of the year. The amount of rainfall in all sections of the state is adequate for the development of hookworm larvae.

The stool specimens for examination were collected in most counties by a full-time field as-

sistant and in other counties by the personnel of the full-time health departments. These specimens were shipped to the department of Preventive Medicine and Public Health of Vanderbilt University School of Medicine at Nashville, Tennessee. These examinations were made by the small-drop-dilution egg-counting method of Stoll and Hausheer. This technic allows for determining both the incidence and intensity or infestation of worm burden.

WITH FLORIDA'S

Dr. Charles M. Pearce arrived in Tavares a few weeks ago to become director of the Lake County Health Unit. Although a native of Alabama, Dr. Pearce has spent much of his life in West Florida. He went to Lake County from Oklahoma where he was state health commissioner for four years.

All water works and sewerage officials and others interested in this type of work are urged to attend the 13th annual convention of the Florida Section of the American Water Workers Association to be held in Miami May 4, 5, 6 at the Alcazar Hotel. Part of the program will be devoted to discussion of sewerage systems and sewage disposal.

The Gadsden County Health Department reports they have installed a health bulletin board in the lobby of the court house. On it is recorded the incidence and prevalence of diseases in the county. This barometer tells people at a glance the exact condition of Gadsden County's health. The space is also utilized for the posting of valuable health education messages.

Miss Cynthia May Mabbette of Ft. Myers and Mrs. Mary W. Matthews, of West Palm Beach, district public health nursing supervisors, and Sam D. Macready of West Palm Beach, president of the Florida Public Health Association, represented District 5 at the recent meeting of the Florida Tuberculosis and Health Association in Sarasota. Mr. Macready was made a member of the board of directors of the association.

All officers of the Florida Tuberculosis and Health Association were re-elected at the annual meeting in Sarasota: G. E. Therry of West Palm Beach, president; E. M. Newald of Orlando, vice-president; Mrs. M. M. Ebert of Lake Wales, secretary; S. B. Hilyard of Jacksonville, treasurer. Dr. W. A. McPhaul of Jacksonville, state health officer, and Dr. M. Jay Flipse of Miami, chairman of the Tuberculosis and Public Health committee of the Florida Medical Association, continue as advisory members of the Executive Committee.

"The health of the child is the power of the nation." That is the 1939 slogan for the annual May-Child Health Day celebration being observed throughout the country. Miss Ruth E. Mettinger, director of public health nursing for the Florida State Board of Health, has been appointed chairman of the Florida program by the United States Children's Bureau.

HEALTH WORKERS

"Let's Open Our Eyes," one-reel syphilis sound film recently acquired by the Florida State Board of Health, has been shown to more than 4,000 men, women and teen-age children in Florida since January. Its showing has been sponsored by medical societies, schools and civic organizations. The film emphasizes most emphatically that closing one's eyes to the seriousness of Florida's syphilis problem does not remove the danger. It advocates opening our eyes and taking action.

The preliminary survey of five counties having a high incidence of malaria is nearing completion and it is hoped that these counties—Gadsden, Leon, Jackson, Wakulla, and Taylor—will find it possible to not only carry out the recommendations of the survey, but also to continue the control until remedial results are attained.

National Negro Health Week, which has as its objective general sanitary improvement of the community and improvement of the health of the individual and family, was observed during April in nearly every county in Florida. Those counties reporting more extensive campaigns to HEALTH NOTES were Gadsden, Escambia, Lake.

Dade, Polk and Alachua counties are actively campaigning for a county health unit for their respective counties. Other counties talking about establishing units are Volusia, Marion, Nassau, Suwannee, Lafayette, Flagler, St. Johns, Baker and Putnam.

An article entitled "Tuberculosis in Florida" by Dr. A. J. Logie, Director, Division of Tuberculosis Control, State Board of Health, appeared in the March issue of the AMERICAN REVIEW OF TUBERCULOSIS. The case-finding feature of the Florida Anti-Tuberculosis Program, including a tuberculosis survey of senior high school and freshmen college students is described in detail.

Annual reports have been received by the library at the State Board of Health headquarters in Jacksonville from the Orange, Broward and Jackson county health departments and the State Board of Health District No. 5 with headquarters at West Palm Beach.

The Florida Anti-Mosquito Association held its 13th annual convention at Daytona Beach the middle of April. Officers for 1939-40 are: Dr. Willard V. King of Orlando, president; Dr. John E. Elmendorf of Pensacola, first vice-president; Norman G. Platts of Ft. Pierce, second vice-president; George F. Catlett of Jacksonville, secretary-treasurer.

SCHOOLS HOLD KEY SPOT IN ANTI-HOOKWORM DRIVE

JOE HALL

Mr. Hall is consultant in Health and Physical Education for the Florida State Department of Public Instruction. The high prevalence of hookworm disease among school children leads him to believe teachers and principals should lead the attack on hookworms.

BECAUSE hookworm disease is more prevalent among school age children than any other age group in Florida, this disease is definitely a school problem of the first magnitude. Therefore, the object of this article is to stress the fact that school officials have a deep-rooted responsibility in any campaign to eradicate hookworm disease from Florida.

The schools hold a strategic position from which to radiate information as to ways and means of combatting hookworm disease, also in promoting activities which will eventually stamp out this disease entirely. That it can be stamped out has been proved in other states.

It is simply a matter of intelligent application of knowledge we already have, and whole-hearted cooperation between all interested groups. In accomplishing this end Florida's schools will, beyond any doubt, wish to play their role as it should be played.

Before delving into the matter of how we can solve our distressing hookworm problem, let us glance briefly at the problem itself. In some sections of the state 70 per cent of the white population is infested with hookworms. In many communities more than 50 per cent of the children in the schools are suffering with hookworm disease, and in some the rate runs close to 100 per cent.

As stated before, the highest incidence according to age groups was found in school years, and the peak of this incidence between the ages of 15 and 19 years. It is also significant that the situation is more than twice as serious among white people as it is among colored.

Frequently, in dealing with health problems the statement is made that nothing can be done about it because the expense of control and treatment is too great. Or, in the case of schools, that they should not interest themselves in problems belonging to the medical profession.

Neither of these statements can be made in regard to hookworm disease, however, because medical science and sanitary experts have, after long investigation and experiment, effected a means of treating hookworm disease that is satisfactory in every respect. And, through the State Board of Health, they have made this service available to the people at little or no expense.

Furthermore, preventive procedures have been developed to a point where they are completely effective when used. The great problem now seems to be to stimulate communities to action.

A complete school health program consists of four parts:

The removal of drains upon the child's system caused by any one of various kinds of infections.

The removal of any stress and strain which may be brought upon the individual child by environmental conditions, emotional upsets, et cetera.

Presentation of health, information, and formation of good health habits.

Development of muscular and organic vigor through physical activity.

It is significant that the very first step is "the removal of any drains" that may be undermining the child's system. For drains of any kind may cause the whole body, including the brain, to function improperly.

Until the cause of the physical drain is removed the child thus effected cannot be expected to take an interest in school work. Certainly a child cannot participate satisfactorily in educational and athletic programs unless he possesses sufficient vigor and energy to allow him to function normally. And certainly a child who is suffering with hookworm disease is not and cannot function normally.

Those factors in climate which have made Florida such an enjoyable place in which to live have also favored the propagation of

The principal and faculties of schools should give their immediate attention to the critical problem of hookworm disease. The steps involved are simple:

1. Secure accurate information on how hookworm may be prevented. (This information may be secured from the State Board of Health headquarters in Jacksonville.)
2. Take the necessary steps to determine those in the school who are infested with hookworm.
3. Work out a plan for ridding these individuals of the disease. Such a plan can be worked out through the cooperation of the State Board of Health, the local physician, the school, the board of education, and the parents.
4. Build a special educational program which will inform the community on the harmful effects of hookworm, and inform them on the ease with which it can be prevented through proper sanitary facilities.

hookworms. The only way to successfully and economically eradicate hookworm disease is through a cooperative program between schools, the State Board of Health, private physicians and others interested in improving the health of Floridians, especially the children.

Our schools should point the way.

CONTROL OF HOOKWORM DEPENDS ON SANITATION

G. F. CATLETT, C.E.

Rid Florida of insanitary sewage disposal and you will rid Florida of hookworm disease, says Mr. Catlett, director bureau engineering. Florida State Board of Health.

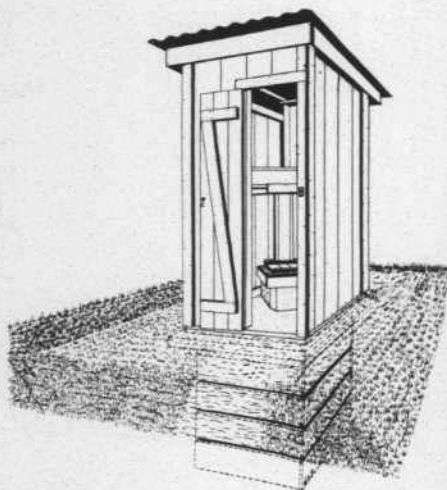
THE control of hookworm disease is entirely a matter of proper disposal of human excreta. If human excreta is permitted to pollute soil surface, hookworm disease will be transmitted by this polluted soil from person to person and family to family.

The reason for this is that persons afflicted with hookworm disease carry hookworm eggs in intestinal wastes. When these germ-carrying wastes are deposited into insanitary privies or upon the open ground the soil becomes contaminated with hookworm eggs that hatch into baby hookworms. Contaminated soil often extends far beyond the area immediately adjacent to the insanitary privy.

By far the most satisfactory and safe method of disposing of excreta is a running water toilet connected with a municipal sewerage system. Unfortunately, however, this is not available to everyone.

Also, many small towns have no sewerage system at all. In such cases the next best method is a bio-chemically treated septic tank, providing it is properly designed, of sufficient size and has been properly installed by a plumber.

Where nothing but outdoor privies are used, they must be the



sanitary type approved by the Florida State Board of Health if the danger of hookworm disease is to be eliminated. It is a sad fact that a very large number of privies now in use are makeshift, open surface privies. And in the cases of many homes and even schools, no privy at all.

Since, at the schools, there is a little bit of every family and thus some of everybody's diseases, the sanitation of the school is by far the most important sanitary problem.

Your local health officer or the Florida State Board of Health Engineering department will furnish upon request, bulletins on sanitary privies and septic tank installations. Any community desiring to institute a program of hookworm control should consult the State Board of Health for technical direction. Improper procedures will only waste money and effort.

BOOK REVIEWS

These books available from the State Board of Health Library

Your Health Dramatized by W. W. Bauer and Leslie Edgley. N. Y., Dutton, 1938. **\$2.25**

The American Medical Association broadcast over a national network during 1937-1938 a series of dramatic sketches under the general title "Your Health." These have now been adapted for presentation as short stage plays by amateur groups. The authors had junior and senior high school students particularly in mind. Teachers will find these plays excellent material for health lessons. In each case the cast of characters is not too large, nor the scenery too complicated. The health teachings set forth are authentic and are achieved in an entertaining and not an irritating fashion.—E. H. B.

Health, Hygiene, and Hokey by W. W. Bauer, M.D., Indianapolis, Bobbs-Merrill, 1938. **\$2.50**

The Director of Public Health Education activities of the American Medical Association has written a book which, to quote him, is offered "in the hope of elucidating practical fundamental principles underlying the health of the individual . . . and of building up the scepticism of the reader toward information offered him about his health." A careful reading should at any rate accomplish the latter, because the author begins, continues, and ends on a skeptical note.

Chapters are devoted to diet, vitamins, sleep, exercise, cosmetics, quackery, medical care costs. Attempts to cajole the reader are made through catchy titles. For example, the chapter on cosmetics is called "Soft Soap and

Skin Games." That on quackery, "A Fake for Every Ache"; the chapter on vitamins, "Wim, Wig-or and Witamins." The book is full of useful information on ways to avoid the many health fads and fancies which beset modern man. No one can fail to benefit from the advice contained within its pages. And yet, this reviewer regrets the persistently didactic tone adopted throughout.

—E. H. B.

The Changing Community by Carle C. Zimmerman. N. Y., Harper, 1938. **\$3.50**

In this volume a noted sociologist makes a valuable contribution to the social science field, and his findings are of particular interest to public health workers. In these days when such subjects as housing and regional planning engage the attention of physicians, public health nurses, and engineers, the book will find an important place in professional reading. Professor Zimmerman discusses several typical communities from an historic, economic, and environmental viewpoint. The reasons behind the growth, development and decay of any community are here clearly set forth. Public health workers know the importance of surveying any community in which they work as to its present status. Knowledge of the community's past history and future possibilities should not be overlooked in any such study of public health needs. This book will prove an excellent guide-post for such purposes.—E. H. B.

DEATHS FROM CANCER 1938

(All Forms)

Bureau of Vital Statistics, Florida State Board of Health

EDWARD M. L'ENGLE, M.D., Director

Counties	Total	White	Colored	Counties	Total	White	Colored
STATE	1,551	1,308	243	Jefferson	3	1	2
Alachua	23	13	10	Lafayette	2	2	0
Baker	1	0	1	Lake	23	19	4
Bay	10	9	1	Lee	12	11	1
Bradford	3	3	0	Leon	10	9	1
Brevard	10	6	4	Levy	8	5	3
Broward	36	33	3	Liberty	3	0	3
Calhoun	1	0	1	Madison	8	4	4
Charlotte	2	2	0	Manatee	29	25	4
Citrus	7	5	2	Marion	14	6	8
Clay	4	3	1	Martin	6	4	2
Collier	1	1	0	Monroe	19	17	2
Columbia	17	13	4	Nassau	2	2	0
Dade	235	214	21	Okaloosa	4	4	0
DeSoto	16	13	3	Okeechobee	0	0	0
Dixie	2	2	0	Orange	83	69	14
Duval	174	134	40	Osceola	11	10	1
Escambia	44	33	11	Palm Beach	49	44	5
Flagler	2	2	0	Pasco	6	6	0
Franklin	2	2	0	Pinellas	180	171	9
Gadsden (Ex.)	14	7	7	Polk	60	49	11
State Hospital	14	12	2	Putnam	23	20	3
Gilchrist	1	1	0	St. Johns	15	12	3
Glades	2	2	0	St. Lucie	4	4	0
Gulf	2	1	1	Santa Rosa	9	8	1
Hamilton	4	4	0	Sarasota	18	16	2
Hardee	7	6	1	Seminole	16	13	3
Hendry	0	0	0	Sumter	5	4	1
Hernando	2	1	1	Suwannee	4	2	2
Highlands	13	11	2	Taylor	5	1	4
Hillsboro	167	148	19	Union	9	6	3
Holmes	5	5	0	Volusia	57	51	6
Indian River	6	4	2	Wakulla	3	1	2
Jackson	12	11	1	Walton	8	8	0
				Washington	4	3	1

CANCER DEATHS BY AGE GROUPS

Age Groups	Total	White	Colored
1-9	7	4	3
10-24	22	18	4
25-34	69	35	34
35-59	584	443	141
60+	869	808	61

These two tables, showing deaths from cancer in Florida for the year 1938, prove that there are more than twice as many deaths from cancer among white people as among colored. The statistics also verify the well known fact that cancer is a disease of middle and later life.

The white death rate from cancer was 108.3 as compared with a colored death rate of 49.4. Some of this difference may be accounted for by more competent medical attention among white people and, therefore, more accurate diagnosis but it is the opinion of health officials that this is not alone responsible for the marked difference.

Persons 60 years old and over who died from Cancer accounted for a death rate of 584.9 in this age group, as against a 91.3 rate for persons of all ages. Only 6 percent of the total deaths from cancer occurred among persons under 35 years of age.

Highlighting counties in extreme sections of the state, Escambia reported a total of 44 deaths from cancer, Leon 10, Duval 174, Orange 83, Pinellas 180, Dade 235.

FLORIDA HEALTH NOTES

ESTABLISHED 1890
JACKSONVILLE, FLORIDA

Official Publication State Board of Health

VOLUME 31 • NUMBER 4 • APRIL • 1939

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W. V. King, Ph.D., Orlando U. S. Bureau Entomology

Florida Health Notes, published monthly on the 25th of the month by the Florida State Board of Health. Publication office, Jacksonville, Fla., headquarters of the State Board of Health. The editors are not responsible for unsolicited manuscripts. Copy for publication must reach Jacksonville not later than first day of month preceding date of issue.

430,000 Tests Were Performed by Florida's State Laboratories During 1938

•

Next month's issue of HEALTH NOTES will tell—

Florida physicians what services they can expect from Florida's five state laboratories, the best methods of sending in specimens for examination and much other useful information.

Florida municipal officials about state laboratory examination of public and private water supplies, and examination of milk for purity and butter content.

Florida citizens what sort of free services they can expect for themselves as well as their family physician.

•

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HEALTH NOTES

LABORATORY MANUAL

VOL. 31 No. 5-6

MAY - JUNE 1939

OFFICIAL PUBLICATION

STATE BOARD OF HEALTH

JACKSONVILLE, FLORIDA

FLORIDA HEALTH NOTES

ESTABLISHED 1890
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VOLUME 31 ■ NUMBER 5-6 ■ MAY-JUNE ■ 1939

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This issue is a Laboratory Manual. Regular Health Notes features will be resumed next month.

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Using Laboratories To Best Advantage

J. N. PATTERSON, M.S., M.D.

Director of State Laboratories hopes Florida physicians, city officials and others will use this issue of Health Notes as guide to their laboratory problems.

THIS number of HEALTH NOTES is devoted exclusively to the work of the laboratories of the Florida State Board of Health. A sincere effort has been made to make clear, particularly to the physicians of Florida, the manner in which the laboratories can be utilized to the best advantages for all concerned. A list of the tests performed, specimen containers and biological products distributed, and other pertinent information is given. In addition there is information regarding water, milk and sewage analysis which is of particular importance to water-works operators, city officials, dairy workers, engineers. It is hoped that this issue of the Health Notes will be kept by the physician as a guide to his laboratory problems and by these other individuals as an aid in their work.

No modern physician would attempt to practice medicine without the aid of a laboratory. History, physical examination and laboratory findings constitute a triad which must be worked out completely and carefully before one should make a diagnosis.

Beginners and those uninformed in biological process expect too much of the laboratory. They expect the laboratory to diagnose the case not knowing that other conditions may cause a similar reaction. For example, it is well known that malaria, yaws and occasionally infectious mononucleosis, may give a positive flocculation or complement fixation test for syphilis even in the absence of the latter disease. Then too, an infection by an organism other than the typhoid bacillus may produce a rise in the titre of the Widal test—the so-called anamestic reaction.

Many more examples of this nature could be cited and these are due to biological conditions over which we have no control. We, in the laboratory, report to you just what we find and as much interpretation as we can safely give, but, you, the physician, with the aid of the history, physical examination and laboratory data, must arrive at the diagnosis.

FLORIDA STATE BOARD OF HEALTH LABORATORIES

J. N. Patterson, M.S., M.D.
Director of Laboratories

laboratory	Bacteriologist in Charge
JACKSONVILLE	Miss Pearl Griffith
(Central Laboratory)	Assistant Director
AMPA	H. D. Venters
MIAMI	Mrs. Edith Rahn Powell
ENSACOLA	Mrs. Nina Branch
ALLAHASSEE	Miss Estelle Bryan

Please help the laboratory keep their records straight by legibly writing or printing the patient's name.

Public and Private Water Supplies Tested

Bacteriological examination of public water supplies required at specified intervals by State Board of Health when submitting samples, standard sample cases must be used and regulations of Rule 97 fulfilled.

CONTROL PROTECTS HEALTH

THE State Board of Health Laboratories do their part in maintaining proper sanitary control of the public water supplies in the State as well as giving assistance to individuals concerning the bacteriological or sanitary quality of their own private water supplies.

PUBLIC WATER SUPPLIES

In order to maintain proper sanitary control of all public water supplies the State Board of Health passed Rule 97, which provides for the regular bacteriological examination of samples of water from public supplies at stated intervals. This rule further requires the owner or operator of these supplies to provide themselves with standard water sample shipping cases (of a type approved by the State Board of Health) for use in transmitting samples to the laboratory. The procedure followed by the laboratory as regards water sample collection, their shipment and examination are set forth below.

There are at the present time in the State approximately 200 standard water sample cases, the property of municipalities or public water supply operators. The municipality is responsible for the express charges on the sample case to and from the laboratory.

These cases are provided with from three to six sterile water sample bottles, prepared and furnished by the laboratory. With each bottle is a data blank or information sheet which indicates very clearly the information required pertaining to the supply from which the samples are taken. This sheet also contains definite instructions for collecting water samples for bacteriological examination.

Great care must be exercised in collecting samples of water for bacterial analysis and it is imperative that the instructions accompanying the sterile bottles are followed very closely. Any deviation from these instructions may result in contamination of the sample collected and throw suspicion on an otherwise satisfactory water supply.

Space is also provided on this data sheet for the final results. This sheet is wrapped around the

sample bottle and remains with the sample until it is entered for examination, at which time a serial number is placed thereon.

When it is realized that many samples of water are received daily in the laboratory the need for supplying the information indicated on the data sheets will be appreciated. This information covers the following points: (a) owner of supply and address, (b) date and hour of collection (sam-

delay in delivery to the laboratory, operators are instructed to submit samples only on Monday, Tuesday or Wednesday unless an emergency exists and in such event samples may be submitted at any time.

Although, according to the ruling of the State Board of Health, samples are required from each public supply at a stated time, operators of these supplies may submit samples more frequently

TESTS REGULARLY PERFORMED

Below, in order of frequency, are listed the tests regularly conducted in the laboratories of the State Board of Health

Kahn test for syphilis

Stool examinations for intestinal parasites

Agglutination tests for: Typhoid fever; paratyphoid A and B; undulant fever; typhus fever and tularemia

Examinations for gonorrhea

Blood smear examinations for malaria

Throat cultures for diphtheria, Vincent's angina, streptococci, etc.

Examinations of water for purity

Examinations of milk for purity and butter fat content

Sputum examinations for tuberculosis and bronchial spirochetosis

Examination of miscellaneous cultures and smears

Examination of brains of animals and humans for rabies

Animal inoculations as indicated

The central laboratory and the two larger branch laboratories (Tampa and Miami) do the Kahn serodiagnostic test for syphilis and most of the other laboratory procedures performed by the State Board of Health. The two smaller branch laboratories do not do the Kahn test and send the sera to the central laboratory for this test. All requests for virulence tests, animal inoculation, etc., should be sent to the central laboratory at Jacksonville with an accompanying letter to the Director giving pertinent facts regarding the case and type of test requested.

ples must be submitted to the laboratory promptly upon collection), (c) name of collector, (d) source of supply (if well, give depth) with notation concerning contaminating influences which might affect the supply.

A water sample received without the requested information causes much confusion and often results in delaying the final report. To prevent receipt of samples during week-ends, and a possible

delay in delivery to the laboratory, operators are instructed to submit samples only on Monday, Tuesday or Wednesday unless an emergency exists and in such event samples may be submitted at any time.

The standard shipping cases are promptly returned to their owners after samples have been received and the case has been refilled with sterile bottles. Thus, the water works operator is in a position at all times to collect and submit samples of water to the laboratory for bacteriological ex-

Precautions Against Hemolysis Set Forth

When hemolysis sets in, blood cannot be examined and new samples must be taken . . . this article offers suggestions for guarding against hemolysis.

HEMOLYSIS may be defined as a dissolution of the red corpuscles of the blood freeing the hemoglobin and producing a reddish colored serum.

Marked hemolysis produces an opaque deep red serum preventing an accurate serologic reading so that the specimen has to be discarded and a new one requested. Hemolysis may be caused by physical, chemical or bacterial factors. Extremes of heat or cold or excessive shaking will cause hemolysis.

A single drop of water, traces of acids, alkalies or alcohol used in cleaning or sterilizing test-tubes, syringes, etc., will also produce hemolysis. If the blood stands for several days at room temperature and any bacteria have been introduced, bacterial growth will develop to cloud the serum and hemolysis will occur.

During digestion and food absorption blood serum is cloudy due to the presence of chyle. Therefore, blood specimens should be collected in the morning before breakfast or several hours after a meal when the serum is clear.

Extreme care should be practiced in collecting blood specimens and in their handling prior to laboratory examination if he-

molysis is to be prevented. A hemolyzed specimen means a delay in obtaining the report and hardship to the patient, physician, laboratory technician, wash-room force, shipping clerk, etc. Any precaution that will prevent hemolysis is well worth the effort. The following suggestions will prove of value in preventing this condition.

1. Collect the blood in the morning before the patient has had breakfast or just previous to other meals.
2. Allow the tube containing the blood to stand in a slanted position at room temperature until the blood clots (1 to 3 hours) and then store it in the refrigerator until it is ready for mailing.
3. Forward specimens to the laboratory by the quickest route. Samples should reach the laboratory in the shortest possible time following their collection. Specimens are best taken the first and middle of the week and sent as soon as possible so as not to reach the laboratory over the week-end when it is closed.
4. Remove the needle from the syringe before emptying the contents into the test-tube and expel contents as slowly as possible to prevent mechanical break down of the red corpuscles.
5. Be sure that the needle, syringe and test tube are perfectly clean and dry. If the syringe or needle are not dry then rinse them in a **physiological solution** of saline.
6. When the patient's red blood cells fragment more easily than normal, the serum can be poured off after the clot forms and this serum sent to the laboratory.

Sewage, Water Plants Checked for Efficiency

Bureau of Engineering, State Board of Health, must make requests for this sort of work . . . investigation and recommendations necessarily of public nature.

A FULL time graduate chemist has been employed and the necessary equipment installed for running water and sewage analyses in the central laboratory of the State Board of Health in Jacksonville. This chemical laboratory is to be used in supervising the efficiency of sewage treatment plants, checking pollution of waters to determine their suitability for public uses and determining required treatment of water, sewage and industrial wastes. It is to be emphasized that all requests for this work must come from the Bureau of Engineering of the State Board of

Health as a part of their investigation.

This laboratory is equipped for running the usual analytical determinations familiar to most water works operators, such as jar tests for coagulation control, calcium carbonate (marble) test for stability, color, turbidity, hardness, alkalinity, chloride, iron, carbon dioxide, etc., in addition to microscopic examinations. Equipment is also available for making sewage analysis in connection with sewage treatment plant surveys for municipalities requesting aid or advice in conjunction with local problems.

EXAMINATION OF MILK

Cities not maintaining a laboratory, yet desirous of obtaining information concerning the quality of the milk furnished the community, may submit samples of milk from the various dairies serving them to the State Laboratory.

These samples should be submitted, fully iced, in the original bottles. Tests to determine the bacterial content, butterfat content, and phosphatase test to determine proper pasteurization, are conducted upon all samples of milk received.

The phosphatase test is a very sensitive test which will detect the presence of an enzyme found in raw milk if there is even a slight drop in the temperature below 143° F or if it is not pasteurized for the full half hour. This test provides public health authorities and the dairy industry with an accurate control of pasteurization.

Samples of cream, ice cream, and ice cream mix may also be submitted for butterfat determinations.

The essential laboratory tests of value in maintaining proper sewage plant operation, for which this laboratory is equipped, are listed herewith in the relative order of their importance to plant operators. Biochemical oxygen demand (B.O.D., suspended solids, settleable solids, chlorine demand, residual chlorine, total solids in raw sewage and sewage sludge, percent moisture, volatile solids and ash in sewage sludge,

pH, and dissolved oxygen (D.O.) are of major importance for efficient plant control. Additional determinations such as chlorides, acidity and alkalinity, although of lesser value than the others mentioned above, are of significance in making complete treatment plant surveys.

Some of the analyses, especially those of little value unless performed on the grounds, can be done in the field with assistance of the State Board of Health or in conjunction with water or sewage laboratories where the communities involved are so equipped. Other tests where sample preservation can be resorted to will be conducted on samples forwarded to the Jacksonville laboratory. Naturally, of course, investigations and recommendations made to communities by the State Board of Health must be of a public health nature and cannot be made where the problem should be referred to consulting engineers and chemists.

Some communities have been able to install and equip combined chemical and bacteriological laboratories and to maintain properly trained operators on water treatment plants and in some instances, on sewage treatment plants. Other communities have

SPECIMEN CONTAINERS AVAILABLE

Below are listed the different specimen containers, distributed by the State Board of Health:

- Kahn specimen containers
- Agglutination specimen containers
- Sputum specimen containers
- Stool specimen containers for intestinal parasites
- Stool specimen containers for bacterial cultures
- Throat culture specimen containers
- Malaria specimen containers
- Gonococcus specimen containers
- Water specimen containers

The central laboratory maintains a large supply of specimen containers and a much smaller supply is kept in the branch laboratories. All large orders for specimen containers should be sent to the central laboratory. The branch laboratories do not have the equipment and personnel to clean large numbers of specimen containers nor the facilities for packing and shipping. Even in the central laboratory our equipment and personnel are not adequate to promptly keep up with the demand but all orders are supplied as soon as possible. A shipping clerk is on duty in the central laboratory for packing and sending of all supplies.

Two types of stool specimen containers are supplied. One type specimen container is for examination of intestinal parasites and contains 2% cresol solution while the other type specimen container is for bacterial culture work and contains 30% glycerin.

been unable, financially, to install a laboratory or, in some cases, to secure the services of a trained technician after its installation.

In all cases the facilities and personnel of the Florida State Board of Health are at the disposal of those communities both in an advisory capacity and as an instructive agency on all problems relating to water and sewage purification methods and allied engineering fields.

Agglutination Tests Have Been Revised

Physicians urged to submit 5 cc. or more of whole blood or blood sera and to discontinue sending dried blood on slide.

WE have completely revised our agglutination procedures and now use a combination of the technique employed by the National Institute of Health in Washington and the Laboratories of the Board of Health of Maryland.

Miss Pearl Griffith, Bacteriologist in Charge of the central laboratory, spent two weeks in these laboratories studying their methods. Miss Griffith, Mr. R. L. Robertson, one of the bacteriologists in the central laboratory, and the Director of the Laboratories worked out the procedure now in use.

We make our own antigens for these tests from organisms grown from cultures obtained from the National Institute of Health. These antigens are checked for purity and also for specificity of reaction and antigenic quality. Negative and positive controls are always set up as a check.

Physicians are asked to submit 5cc (or more) of blood in a Kahn tube and to specify clearly the particular test or tests desired. A new data blank for this purpose will soon be available. We urgently request physicians to send whole blood or blood sera and to discontinue the sending in of dried blood on a slide.

Below are listed the agglutination tests performed and our interpretation of the titre (the highest dilution of blood serum producing clumping of the bacteria):

	Titre of:	
Typhoid (Widal) Para typhoid A & B Undulant Fever Tularemia	{	1-40 or less no significance
		1-60 suggestive
		1-80 or 1-160 and up usually diagnostic
Brills (Weil-Felix)	{	1-30 or less no significance
		1-160 suggestive
		1-320 and up usually diagnostic

The result of agglutination tests should be interpreted by the physician only with a full knowledge of the clinical course and the history of the patient, especially with reference to previous vaccination. Great care must be exercised in the interpretation on vaccinated individuals. The test should be repeated, at least in all doubtful cases, in order to secure an index of the rise or fall of the agglutination titre. A rising agglutination titre is strong evidence of that particular disease being present but not absolutely diagnostic of it.

Agglutination tests in general do not lend themselves to early diagnosis since agglutinins do not develop as a rule until the disease has been present for one to three weeks. It is believed by many authorities that the presence of "O" typhoid agglutinins is indicative of infection while the "H" typhoid agglutinins arise in most instances from vaccination so that a rise in the titre of the serum against the "O" antigen (living or alcoholized emulsion of typhoid bacilli) has more significance than does a rise in the "H" antigen (formalin killed typhoid bacilli).

Laboratory Aids In Diagnosis

Causitive organism, type of examination performed and best method of submitting specimens given for each separate disease.

UNDER each separate disease (listed alphabetically) are noted the causative organism, type of examination performed in State Board of Health laboratories and the best method of submitting specimens. Effective means of prevention by vaccines or treatment by serums are discussed if these products are available.

DIPHTHERIA

The inciting micro-organism is the *Corynebacterium diphtheriae*. A swab from the nose and throat should be submitted in a diphtheria specimen container as well as a smear from the lesions on a glass slide.

Diphtheria antitoxin should be given without delay to every patient having clinical diphtheria whether or not diphtheria bacilli are found.

In over 90% of the cases, diphtheria bacilli disappear from the nose and throat within a month's time.

The diphtheria carrier may harbor the organism for a long period of time but these organisms are not necessarily pathogenic in nature. A virulence test should be performed in persistent carriers to be certain whether or not the organisms are capable of producing disease. A request for a virulence test should not be made until three months after the patient has recovered (unless under exceptional circumstances) for experience has shown that most of the micro-organisms re-

tain their virulency for this time. Before submitting a specimen for the virulence test a letter should be addressed to the Director of the Laboratories and arrangements will be made to send suitable media for the growth of these organisms.

There were 32 deaths from diphtheria reported in Florida in 1938. Diphtheria toxoid, and diphtheria toxin for the Schick test are available to the physicians of Florida without charge. Diphtheria antitoxin is supplied to indigent patients only and then only when the emergency arises.

DYSENTERY, BACILLARY

At least 4 distinct types of *B. dysenteriae* have been recognized as the cause of this disease. These organisms usually enter the body by the mouth although the infection may result from the use of unsterile tubing or other instruments employed in the administration of enemas or similar procedures. The micro-organism is usually found in the feces but seldom if ever in the blood stream or in the urine.

The specimen of stool may be submitted in a specimen container supplied for stool cultures (not the specimen containers supplied for examination of intestinal parasites). The value of anti-dysentery serum for the treatment of infections caused by other than the Shiga bacillus is questionable. The State Board of Health does not distribute any biological products against this disease.

GONORRHEA

The inciting micro-organism is the *Neisseria gonorrhoeae* and is usually found in large numbers in the early discharge. A smear from the discharge is best submitted on a glass slide supplied with our gonorrhea specimen container outfit. There were 19 deaths from this disease in Florida during 1938.

HOOKWORM (AND OTHER INTESTINAL PARASITES)

Hookworm disease, as is well known, is very prevalent in Florida. The State Board of Health laboratories performed over 50,000 stool examinations last year.

The disease is caused by the *Necator americanus* or American hookworm. It seldom causes death but is one of the commonest causes of chronic illness in our State.

The specimen of feces is best submitted in the stool specimen container for intestinal parasites. We distribute to the physician free of charge capsules of tetrachlorethylene 8 minim and 16 minim strength. The recommended dosage is 3cc for adults and 3 minims per year of age for children.

We also examine stools for evidence of *Ascaris lumbricoides* (common round-worm), *Oxyuris vermicularis* (pin worm or seat worm), *Strongyloides stercoralis* (*Strongyloides intestinalis*), tapeworm, and *Trichocephalus dispar* (whip worm).

MALARIA

The inciting organisms of malaria in Florida are the *Plasmodium vivax* and *Plasmodium falciparum* or estivo-autumnal. The blood for examination is best taken before the administration of quinine (or other anti-malarial

drugs) and just before the expected chill.

A thick film is far superior to the ordinary thin film, enhancing our chances of finding the malarial parasite approximately 45 times. A large drop of blood is spread on a slide over an area one-half inch in diameter with a needle or toothpick or by tilting the slide. Dry thoroughly in air (DO NOT USE HEAT). Protect from insects while drying, as by placing in a covered slide box over night.

A thin smear may also be submitted along with the thick smear. Two glass slides and a data blank enclosed in a wooden case are supplied for submitting specimens.

There were 166 deaths from malaria reported last year.

PLAGUE

Plague is primarily harbored by the rat but ground squirrels and other rodents have been shown to be the source of infection. The causative organism is the *Pasteurella pestis* and is transmitted, except in the pneumonic form which is spread by droplet infection, by fleas or other blood-sucking insects.

The plague bacilli can be demonstrated in smears and cultures from the material aspirated from a bubo and from the sputum in pneumonic plague. Animal inoculation can also be used to demonstrate the characteristic lesions if a little of the material from the bubo or sputum is sent to the central laboratory.

RABIES

Rabies, or hydrophobia is an acute and rapidly fatal infection of animals. The neurotropic filterable virus is present in the saliva of dogs or other animals suffering with this disease and

may be conveyed to man by bites or scratches. The shorter the distance from the bite to the brain, all other factors being equal, the shorter the incubation period. In the majority of cases, the incubation period in man is from twenty to ninety days. In dogs, the incubation period is usually fourteen days or less.

Animals suspected of having rabies should be confined and not killed, for two reasons. First, many people, in their excitement, shoot or club the head in such a manner as to destroy or mangle the brain, making it impossible to demonstrate the characteristic changes in the brain by which the diagnosis of rabies is made. Second, proof of rabies can seldom be found in the brain until paralysis or other typical symptoms set in shortly before the animal dies. A rabid animal usually dies within ten days after becoming infected and within five days after showing the characteristic symptoms. If an animal is alive after fifteen days quarantine, it may be released with safety. There were 3 human deaths from rabies reported in Florida during 1938.

Specimens shipped to the laboratory for examination must be iced and so packed that danger of infecting the handler during transportation and examination is prevented. The head or brain should be placed in a closed, water-tight container. This container should then be surrounded by a mixture of ice and saw-dust in a large water-tight container. No liquid should enter the compartment containing the head or brain. Heads which are mangled or in which putrefaction has begun, cannot be satisfactorily examined.

The antirabic vaccine can be secured from the laboratories of the State Board of Health at a cost of \$6.00 per complete set of 14 injections.

SYPHILIS

The etiologic agent of syphilis is *Treponema pallidum* which is found in enormous numbers in the primary and secondary lesions and is very scarce in the tertiary lesions. The quickest and most accurate means of diagnosing the disease in the primary stage is by means of a dark field examination of the chancre fluid. At the present time dark field examinations are not performed by the State laboratories but it is hoped in the very near future to purchase the necessary equipment and specimen containers to do this work. This type of an examination is essential for early diagnosis for in the early stage of the chancre the serodiagnostic test is negative in over one-half the cases compared with practically 100% positive results in the secondary stage.

Our examination for syphilis at the present time is the Kahn serodiagnostic test — both the Kahn standard three tube test and the Kahn presumptive test are performed on each specimen. The blood or spinal fluid is submitted to the laboratory in the Kahn specimen container. Special attention should be taken to prevent hemolysis (please read article on Hemolysis on page 55).

Our central laboratory participated in the recent evaluation test for syphilis conducted by the United States Public Health Service, the result of which, to the best of our knowledge, have not been published as yet. However, the following quotation is taken from a letter addressed to Dr. W.

A. McPhaul, State Health Officer, from Dr. J. F. Mahoney, Senior Surgeon, United States Public Health Service and Director of the Venereal Disease Research Laboratory: "The results of the performance of the Kahn standard test in the Florida State Laboratories was well above the average of other participants reporting this procedure. You have no doubt noted the high degree of agreement between your reports and those from Dr. Kahn's laboratory. This is probably indicative of adherence to the procedure prescribed by Dr. Kahn himself and should encourage the laboratory force in their efforts to perform a standard technique in a standard manner."

There were 440 reported deaths from syphilis in Florida in 1938. Bismuth and arsenical preparations for indigents may be obtained by writing the Director of Venereal Disease Control, State Board of Health, Jacksonville, Fla.

TETANUS (LOCKJAW)

The inciting organism is the tetanus bacillus (*Clostridium tetani*). This organism remains localized at the site of inoculation—usually a wound into which some infectious material such as soil contaminated with animal excretions has been forced. The toxin, however, does not remain at the site of infection, but travels along the large nerve trunks to the spinal cord and brain. The incubation period varies directly in proportion to the distance of the portal of entry from the central nervous system or large nerve trunk.

The laboratory can be of very little help in making an early diagnosis as considerable time may be required for demonstration of the organism. However,

some of the exudate can be submitted for culture and animal inoculation. A smear of the exudate may reveal the *Clostridium tetani*.

Passive immunization with 1,500 units tetanus antitoxin should be given as part of the treatment in all injuries favorable to the growth of tetanus bacilli. Therapeutic use of tetanus antitoxin has been rather unfavorable. In these cases it is given in massive doses (100,000 units and over) intraspinously, intravenously and subcutaneously.

The State Board of Health does not provide tetanus antitoxin but this can be obtained from any biological house. There were 57 deaths from tetanus reported in Florida last year.

TUBERCULOSIS

The tubercle bacilli may be found in the sputum or other discharges if the tuberculous process has progressed sufficiently to cause a breakdown of the tissue and the tubercle bacilli are discharged along with the necrotic material. The disease is fairly well advanced frequently before tubercle bacilli are found in the discharge. Specimens of sputum coughed from the deeper portions of the respiratory tract or other discharges should be submitted to the laboratory in the sputum container.

Since children usually swallow sputum, an examination of the stomach washings from these patients is often very desirable.

Animal inoculations will be performed on selected cases if a letter is sent to the Director of the Laboratories giving details of the case and as long as our supply of guinea pigs lasts. There were 987 deaths reported due to tuberculosis in Florida last year.

P.P.D. (Purified Protein Derivative) Tuberculin, 1st and 2nd strength are distributed free to physicians by the laboratories of the State Board of Health.

TULAREMIA (Rabbit Fever)

Tularemia is an acute infectious disease caused by the *Pasteurella tularensis*. It is acquired by man from handling of rodents, especially rabbits, or it can be transmitted from animal to animal, or animal to man by blood-sucking insects.

Discharges from lesions may be sent to the laboratory for culture or animal inoculation. Send in blood in a test tube as directed under Agglutination Test, page 58.

TYPHOID AND PARA TYPHOID FEVERS

These diseases are disseminated through infected water supplies, shellfish, milk or food and less often by more direct contact. The responsible organisms are *Eberthella typhosa* (*B. typhosus*), *Salmonella paratyphi* (Paratyphoid A), *Salmonella schottmulleri*, (Paratyphoid B). Carriers of these organisms who are food handlers represent a particular menace.

Blood for culture is preferable during the first week of illness. Later it is better to send a stool specimen in a special container for stool culture which may be obtained by writing the Director of the Laboratories. Blood may be submitted in a test tube for the Widal test (please read Agglutination Tests, page 58).

When typhoid bacilli can be recovered from the stool one year after the patient has recovered clinically the patient is considered a typhoid carrier. There were 46 deaths reported from typhoid in Florida last year and 1 death from paratyphoid fever.

Triple typhoid vaccine is distributed to the physicians of Florida through the laboratories of the State Board of Health.

ENDEMIC TYPHUS FEVER (Brill's Disease)

Typhus fever is an acute infectious disease occurring in two forms: epidemic, which is louse-borne from man to man; and endemic, which is flea-borne from rats to man. The causative organism is the *Rickettsia prowazeki*. Blood for agglutination should be submitted in at least 5 cc. amounts (see Agglutination Tests, page 58). There were 10 deaths from typhus fever in Florida in 1938.

UNDULANT FEVER (Malta Fever)

Undulant fever is a disease primarily of live stock, secondarily of man. The mode of transfer to man is usually through raw milk and less often through other dairy products. The infection can also be acquired by man through direct contact with infected animals or their tissues. The organisms involved are *Brucella abortus* (Bang's disease of cattle), *Brucella melitensis* (Malta fever from goat milk) and *Brucella suis* (Bang's disease of hogs.)

Blood may be submitted for an agglutination test in a serologic tube. (Read Agglutination Test, page 58.) There were three deaths from undulant fever in Florida in 1938.

MISCELLANEOUS EXAMINATIONS

Many other examinations of a public health nature are performed in the laboratories of the State Board of Health. Any request for an examination not ordinarily performed in our laboratories should be addressed to the Director of the Laboratories.

Good Health *or* *Bad Health*

Which do you want?

GOOD HEALTH is an economic asset, BAD HEALTH an economic liability.

It is cheaper to prevent disease than to cure it.

Efficient public health departments are prevention agencies.

These departments belong to the people.

The people must share the responsibility if they are to share the benefits.

In forming the State-Wide Public Health Committee, the people are accepting the challenge of responsibility.

The Florida State Board of Health has advanced far in the last three years

Marching side by side with the people of Florida it will advance still farther.

Enter THE PEOPLE

See July HEALTH NOTES

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31 No. 7

JULY 1939

OFFICIAL PUBLICATION

STATE BOARD OF HEALTH

JACKSONVILLE, FLORIDA

The People As Partners

Let us look at our problems in a forthright manner.

If large numbers of Florida's population are suffering from the effects of preventable diseases, if thousands of Florida citizens die annually from preventable causes, then we have an economic as well as a moral obligation that has not yet been fully discharged. Although the obligation belongs officially to the State Board of Health, it is impossible for the State Board of Health to fulfill the obligation single-handed. We must have the help of the people.

In establishing the State Board of Health in 1889, the Florida Legislature acted upon the wish of the people, who in effect, said "There are public health problems here that we as individuals cannot remedy. So let there be established an agency whose duty it is to solve these problems."

That was a long step forward, and the people were responsible for that step being taken.

At its inception the department consisted of two persons doing strictly quarantine service for a few thousand persons. Today it includes a corps of public health doctors, nurses, sanitarians and other experts charged with the duty of administering preventive services to 1,698,000 persons. Furthermore, modern public health emphasis has shifted from police duty to health education. This means making available to all the people, all the information procurable pertaining to promotion of good health.

That is why the interest, confidence and cooperation which the people of Florida exhibited in behalf of public health 50 years ago is needed just as much, if not more, today than it was then. That is why the Florida State Board of Health is asking the people to again interest themselves in public health.

Health departments belong to the people, and the people must share the responsibility if they are to share the benefits. The State Board of Health cannot hope to discharge its obligation of preventing disease unless it has the full cooperation of the people.

In forming the State-Wide Public Health Committee the people of Florida are accepting this challenge of responsibility. It follows that public health in Florida will advance in direct proportion to the cooperation received from the people of Florida.

W. A. McPhaul, M. D.
State Health Officer

People Hold Reins To Committee's Strength

JOHN P. INGLE, SR.

Prosperity and good health synonymous, says state chairman—People get what they demand—urges them to demand solution of health problems

THE Florida health survey now nearing completion after six months' study, is to my mind one of the finest opportunities for advancement that has been offered Florida for a long time. When the study is completed within a few weeks, these experts will leave their reports with the proper authorities and go back to their headquarters. What happens after that is entirely up to us.

That is why the State-Wide Public Health Committee was formed. It is their responsibility to study the report and see that its recommendations are put into effect, not just allowed to gather dust as so many reports do.

I have enough confidence in the people of Florida, in their pride and business foresight, to believe that they will make the State-Wide Committee a forceful and perpetuating organization. They are astute enough to know that the future prosperity of Florida rests on the health of her people.

We Southerners did not take too kindly to President Roosevelt's report in

which he called the South the "Nation's Number 1 Economic Problem."

Economics and health are so closely inter-related that it is impossible to tell where one leaves off and the other begins. Good health and a prosperous economic condition are synonymous, as are poor health and poverty. Therefore, it is only common business sense to inaugurate as strong a movement in behalf of public health problems as has been undertaken in behalf of economic problems.

The State Board of Health can carry out recommendations of the forthcoming report only if they have the full support, understanding and assistance of the public. It is up to us, the members of the State-Wide Public Health Committee, to see that our health authorities get this cooperation.

COMMITTEE ANSWERS LONG NEED

Soon after the American Public Health Association field staff came to Florida on January 1 of this year to begin their survey of health problems, they appeared at a meeting of the board to tell us of their desire to organize the State-Wide Public Health Committee. This committee was recommended as the first step in solving our public health problems. We are unanimously in favor of it, since the committee represents that public backing so necessary to efficient and successful operation of any public service.

The board sees in the State-Wide Committee the impetus that will eventually bring us to our goal: A Florida public health department second to none in the nation.

N. A. BALTZELL, M. D.

President—Florida State Board of Health

Shall 12,000 Deaths Go On?

THE following conditions and diseases, all largely preventable and all of a public health nature, represent an average of nearly 12,000 deaths annually in Florida.

1. Malaria — Conservatively speaking, there are at least 102,000 cases of malaria in the state this very minute.

2. Hookworm — Again, conservatively estimated, there are at least 186,500 cases of hookworm among Florida's rural white population alone.

3. Venereal Disease — Applying the estimates used by the U. S. Public Health Service for the nation as a whole, syphilis will strike 1 out of 10 of the adult population of Florida. In all probability the situation is worse than this indicates, since experts whose opinions are worthy of consideration believe Florida has a venereal disease problem far greater than most states.

4. Tuberculosis—There are almost 8000 cases in the state today.

5. Pneumonia—This is the fifth leading cause of death in Florida.

6. Maternal Mortality—Florida ties for sixth place among all states for the highest death rate of mothers in childbirth.

7. Infant Deaths—Each year nearly 1800 babies die before they are one year old.

8. Blindness—Florida has the second highest rate of blindness in the country, according to the State Welfare Board. This may be due to the high rate of syphilis and gonorrhea and to the absence of a law compelling protection of eyes of newborn babies.

9. Insanity, diarrhea, enteritis and pellagra are also problems of major importance in Florida. All these problems can be solved if the public demands their solution and cooperates in bringing it about.

P. T. A. PRESIDENT LAUDS COMMITTEE

The Florida Congress of Parents and Teachers, recognizing "Health and Safety" as the first of the seven cardinal objectives of education, has always been in the forefront of any movement which would bring about better health conditions for the people of Florida.

Therefore, we welcome the formation of the State-Wide Public Health Committee, and hope that its personnel of public spirited citizens, representative of all civic groups in the state, will educate the people of Florida to a knowledge of the conditions shown in the recent state survey made by the American Public Health Association for the State Board of Health.

When a large group of interested, intelligent people finally see the health picture as it really is, I have confidence that they will do something about it. With our God-given climate and natural advantages, we have already a solid foundation for a health program that few states possess.

The recent survey shows that our maternal death rate is much too high; that there are far too many cases of communicable disease and a large number of preventable deaths.

Learning together, thinking through our problems together, and working together to make our Land of Flowers a Land of Healthy People, is the goal of the State-Wide Public Health Committee.

As Co-chairman of the State Committee, and President of the Florida Congress of Parents and Teachers, I pledge our support to this worthwhile campaign of service to the people of our state.

(MRS. MALCOLM) CATHERINE F. McCLELLAN

Florida Loses Millions of Dollars From Disease

HAROLD COLEE

President of State Chamber of Commerce says business must interpret health in terms of dollars and cents. Relentless drive against preventable disease advocated.

LOSS of time, lowering of efficiency in work and untimely death through disease and ill health costs Florida millions of dollars annually. With adequate community as well as individual interest in the improvement of health factors this tremendous cost could be materially reduced. It behooves each man and woman to give more and more consideration to their personal health as well as to the public health problems before the state today.

I am impressed with the effective work being done through the State Board of Health and other agencies seeking to remedy existing conditions. While Florida climatically has numerous favorable health factors yet the fact remains that great improvement can be made with the proper interest and attention.

Business must necessarily interpret health in terms of dollars and cents. This does not mean a heartless financial interest, for business is first cognizant of the contentment and happiness that good health brings. At the same time economic welfare of the individual and his family is a pri-

mary source of happiness and well being. So good health, private and public, combined with economic security and prosperity are vital to the continuous up-building and advancement of this fair land of ours.

The people of Florida through various organizations are becoming deeply interested in an organized program for the improvement of public health. A survey under the direction of the American Public Health Association is practically completed. This presents some vitally important facts regarding the health situation in Florida. These facts should be recognized by the entire citizenship and then through a closely tied-in organization representing individuals and organizations, the program for health improvement should be relentlessly followed through.

Florida's sunshine, mild climate and other elements favorable to good health are God-given assets. We of Florida must take advantage of these favorable factors and apply the best in science and, most of all common sense, looking toward the making of Florida the healthiest state in all the land.

Study's Value Depends On How It Is Utilized

G. F. AMYOT, M. D., D. P. H.

Florida's invitation chosen from among 22 others because (1) Type of sponsorship secured (2) Need for such a study (3) Assurance findings and recommendations would be used.

AT THE request of the State Health Officer, Dr. W. A. McPhaul, the field staff of the American Public Health Association came to Florida on January 1, of this year to conduct a comprehensive and impartial survey of public health problems in the state.

Florida is the third state to be chosen for study out of some 22 that have asked for it. Selection is determined (1) By the invitation and its sponsorship; (2) By the need for a study (3) By the possible utilization of findings and recommendations made in the study.

Dr. McPhaul's invitation had the endorsement of the Florida Medical Association, Florida Public Health Association, Florida Congress of Parents and Teachers, State Department of Public Instruction and State Planning Board. The study is financed in its entirety by a grant from the Commonwealth Fund to the American Public Health Association, which is a national organization of professional and technical public health workers, not a governmental agency.

In studying Florida's health problems and advancing solutions therefor, one of the major recommendations has been the establishment of a State-Wide

Public Health Committee organized on a continuing basis. The value of the report, its searching analysis and its recommendations, will depend upon the progressive interest and activity of this committee and the effectiveness with which its members present the facts to the people of Florida.

The survey will be completed within the next few weeks. Its findings will improve the health of the citizens in Florida only insofar as major recommendations are enthusiastically accepted and merged into a long-range program by health officials and public leaders. It will be possible to build such a program from the report, because the data contained therein reveals both strengths and weaknesses, and indicates where concentration of effort will produce the quickest and best solution to specific problems.

The field staff making this study gratefully acknowledges the splendid help and untiring efforts of the Bureau of Health Education of the Florida State Board of Health which has guided the organization of the State-Wide Public Health Committee. Sincere appreciation is also expressed for the assistance extended by members of the Committee and others interested in the study.

State-Wide Committee-- What It Is, Why It Is

Civic leaders join forces in attack on Florida public health problems—four main objectives adopted—each county chooses its own project

FLORIDA'S most prominent civic leaders and health workers are banding together in an organization known as the State-Wide Public Health Committee. The good will, enthusiasm and influence of such a group organized in behalf of public health is in itself important.

Members of this committee are deeply concerned over Florida's public health problems, and sincerely interested in seeing that they are solved. To this end they are adopting the following specific purposes:

1. Consideration of the American Public Health Association field staff's recommendations for meeting Florida's health problems.
2. Promotion of approved recommendations.
3. Dissemination of disease prevention information throughout all communities in order that its people may know the best methods of utilizing present public health facilities and of augmenting them when that becomes necessary.
4. Promoting full-time local health units for all counties that do not now have them. Perpetuating those county units now operating in 17 counties by supporting and actively participating in their programs.

John P. Ingle, Sr., of Jacksonville, is state chairman. A former president of the Jacksonville Chamber of Commerce, the Jacksonville Rotary Club, the Community Chest for two terms, and the Jacksonville Motor Transit Company, Mr. Ingle has been outstanding in civic affairs of this state for many years.

Mr. Ingle's co-chairman is Mrs. Malcolm McClellan, president of

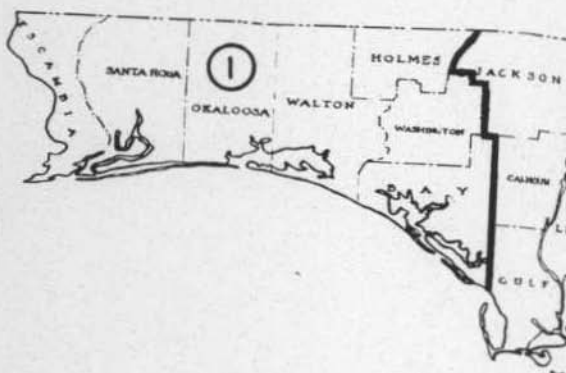
the Florida Congress of Parents and Teachers. Serving with them as the Executive Advisory Committee are Dr. Thomas E. Buckman, president of the Duval County Medical Society; Mrs. Willis M. Ball, Chairman of the Advisory Committee of the Duval County Health Unit; Mrs. Thurston Roberts, 1st Vice President of the Florida Federation of Women's Clubs; Mr. Harold Colee, president of the Florida State Chamber of Commerce.

Directors are chairmen of the seven districts into which the state has been divided in order to facilitate committee operation: Marion T. Gaines of Pensacola, F. A. Rhodes of Tallahassee, Clifford C. Payne of Jacksonville, Edward M. Newald of Orlando, Celestino C. Vega, Jr. of Tampa, J. G. Holst of Ft. Myers, A. J. Cleary of Miami. Meetings have already been held in all Districts.

Each district has one or more co-chairmen, and each county will have its own chairman and co-chairman whose responsibility it will be to organize a representative county membership and direct the activities of local committees.

Each county will decide which problem should be attacked first in its particular locality and adopt this as a project. The first county to report a project is Dade, whose members are participating in a lively campaign for a Dade County Health Unit.

Number of Deaths and Rate Per 100,000 Population, 1937



DISTRICT 1

	Number	Rate	State Rate	U. S. Rate
Malaria	29	19.7	12.2	2.1
Tuberculosis	46	31.3	57.8	53.6
Pneumonia	125	85.1	73.5	41.0
*Maternal deaths	139	8.9	8.4	5.7
†Infant deaths	193	59.1	59.7	54.4
Diarrhea and enteritis	37	25.2	16.7	11.1

DISTRICT 2

Malaria	55	33.8	12.2	2.1
Tuberculosis	77	47.4	57.8	53.6
Pneumonia	190	116.9	73.5	41.0
*Maternal deaths	163	9.7	8.4	5.7
†Infant deaths	245	71.2	59.7	54.4
Diarrhea and enteritis	35	21.5	16.7	11.1

DISTRICT 3

Malaria	41	11.1	12.2	2.1
Tuberculosis	268	72.3	57.8	53.6
Pneumonia	320	86.4	73.5	41.0
*Maternal deaths	292	9.1	8.4	5.7
†Infant deaths	431	61.6	59.7	54.4
Diarrhea and enteritis	65	17.8	16.7	11.1

DISTRICT 4

Malaria	31	13.2	12.2	2.1
Tuberculosis	99	42.1	57.8	53.6
Pneumonia	145	61.7	73.5	41.0
*Maternal deaths	139	8.3	8.4	5.7
†Infant deaths	209	60.7	59.7	54.4
Diarrhea and enteritis	38	16.2	16.7	11.1

DISTRICT 5

Malaria	33	9.2	12.2	2.1
Tuberculosis	208	58.1	57.8	53.6
Pneumonia	209	58.4	73.5	41.0
*Maternal deaths	207	7.4	8.4	5.7
†Infant deaths	305	52.6	59.7	54.4
Diarrhea and enteritis	55	15.4	16.7	11.1

DISTRICT 6

Malaria	11
Tuberculosis	42
Pneumonia	40
*Maternal deaths	39
†Infant deaths	62
Diarrhea and enteritis	10

DISTRICT 7

Malaria	4
Tuberculosis	226
Pneumonia	198
*Maternal deaths	175
†Infant deaths	312
Diarrhea and enteritis	38

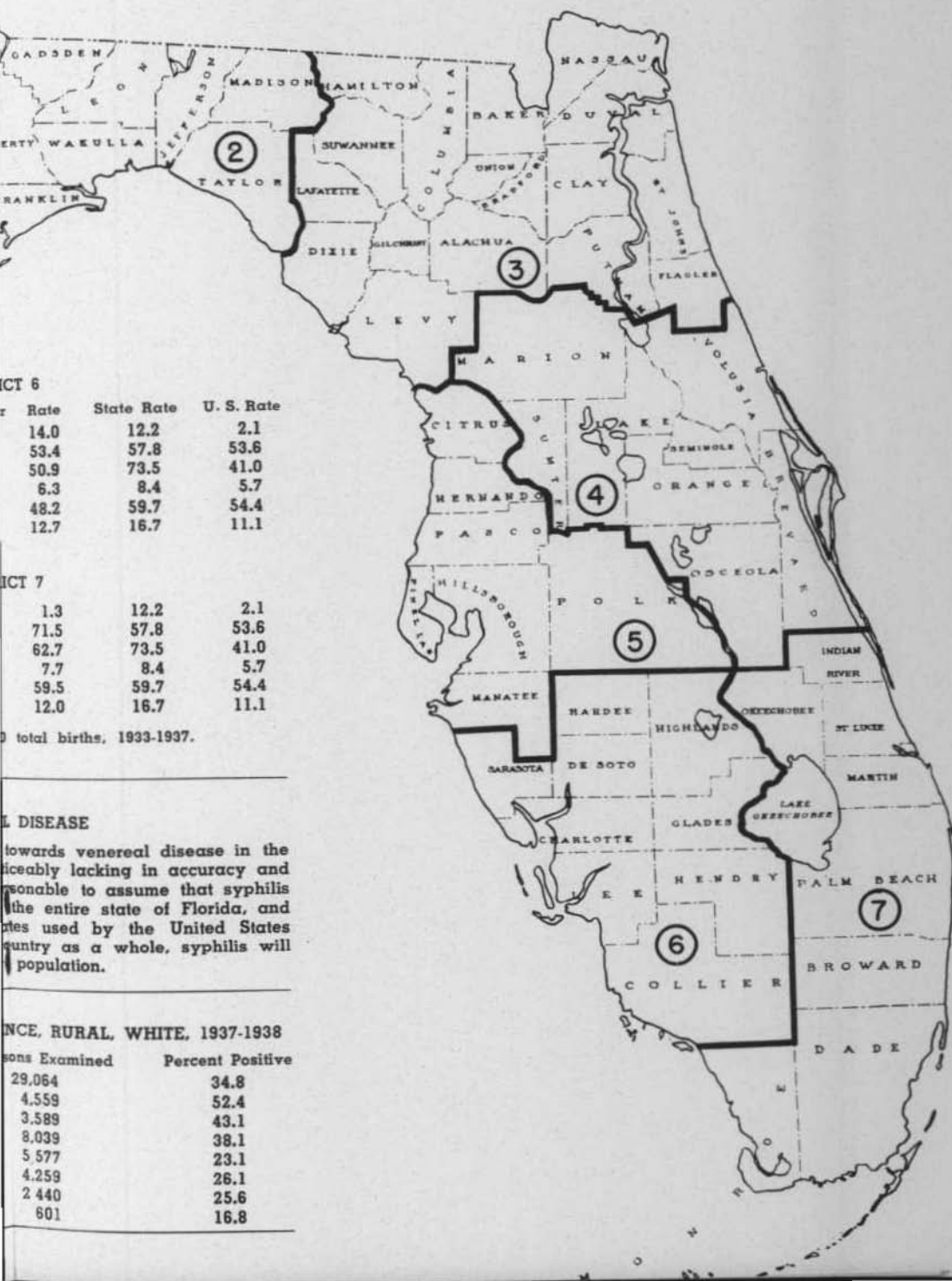
*Five year average rate per 1,000 live births.
†Rate per 1,000 live births.

VENEREAL DISEASE

Due to the general attitude in the past, figures for syphilis are not reliable. Nevertheless, it is recognized as a serious health problem in this state, and that applying to Florida estimates of the Public Health Service for the year 1937 strike 1 out of 10 of the adult population.

HOOKWORM DISEASE INCIDENCE

State	
District 1	
District 2	
District 3	
District 4	
District 5	
District 6	
District 7	



ROSTER

FLORIDA STATE-WIDE PUBLIC HEALTH COMMITTEE

(As of June 1. Organization not yet completed.)

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Mrs. Malcolm McClellan, Co-chairman, Jacksonville

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Dean, Rev.

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Fawkes, Mrs.

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Moor, Frank

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Moore, Walker

Palmer, Dr. Henry E.

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Thorpe, Mrs. A. L.

Tracy, Miss Anna M.

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Beggs, Mrs. Tom

McCants, L. A.

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Perry

Buttler, Byron

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Wood, Rev. David L.
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Mathias, Mrs. Mable
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 Williams, E. H.
Grandin
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Interlachen
 Brush, C. E.
Palatka
 Atkinson, Ralph
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 Gray, Frank

Hyde, C. H.
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 Tucker, Rev. Harry
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 Ye v ngton, Mrs. Herbert
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Satsuma
 Owens, Fred
Welaka
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Miss Anna Heist, Co-chairman, St. Augustine

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St. Augustine
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 Cook, Helen
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 Dickman, Mrs. R. N.
 Felkel, Mrs. Herbert
 Francis, Fred

Frazier, Walter B.
 Griffith, Dr. I. Bernie
 Hawkins, Nina
 Hamblen, Miss Evelyn
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 Spencer, Dr. J. J.
 Spengler, Col. J. H.
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BOOK REVIEWS

These books available from the State Board of Health Library

Layman's Handbook of Medicine
by Richard C. Cabot, M.D.,
Boston, Houghton Mifflin, 1937.
\$2.50.

Here is a book which can safely be recommended by health workers, social workers and librarians in answer to requests for a "medical book" which frequently come to them. The layman is considered as an intelligent person and the author talks with, rather than down to his audience. There is a nice distinction between useful medical information and unnecessary, harmful detail. There is a discussion of the majority of diseases and good advice as to the attitude of the layman toward them. The chapter entitled "Selecting a physician intelligently" is full of useful information—E. H. B.

Prisons and Beyond

by Sanford Bates N. Y., Macmillan, 1938.....\$3.50

What is the hope of our present penal system? The end and aim is the protection of society, yet why do 60 per cent of the men released return again and again for new doses of prison punishment with all its deprivation and despair?

United States Director of Prisons Sanford Bates has had the opportunity to reason why our present penal system so fails and in PRISONS AND BEYOND he raises the question "Can we ever hope to return men to normal living conditions by treating them in an abnormal environment?"

This thought is tangible throughout chapters which lead to "The Prison of the Future" in which he questions, then presents what he believes is the hope of our penal system. He even predicts that the

prison of the future may not be a prison at all!

Designs in Scarlet

by Courtney Ryley Cooper,
Boston, Little, Brown & Co.,
1939.....\$2.75

Young people today can be so easily lured into traveling the crooked road. The plea, however, is that youth should be given its head, to solve its own problem.

This plea for wayward youth "is a system of passing the buck, in which a parent dodges the issue" says Courtney Ryley Cooper, author of DESIGNS IN SCARLET. Parents and particularly mothers should make it their business to know the designs of those who profit at the possible expense of youth's morale, and it is the purpose of his book to describe such sources of pollution.

Mr. Cooper turned "reporter" for a year before he wrote this revealing book. He says the conditions outlined are plain evidence of many minor growths attendant upon a major one, indicating a social disorder demanding deep study by the best brains in sociology, criminology and political economy—all of which takes time. However, he qualifies his statement by saying there are some old fashioned, commonsense remedies which can be applied to check the progress of these conditions.—K. B. K.

HEALTH NOTES Index Available

Available now is the index to FLORIDA HEALTH NOTES for the year 1938. The index complete with subject headings, titles and authors will be furnished upon request addressed to the Bureau of Health Education, Florida State Board of Health, Jacksonville.

FLORIDA HEALTH NOTES

ESTABLISHED 1890
JACKSONVILLE, FLORIDA

Official Publication State Board of Health

VOLUME 31 ■ NUMBER 7 ■ JULY ■ 1939

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Florida Health Notes, published monthly on the 25th of the month by the Florida State Board of Health. Publication office, Jacksonville, Fla., headquarters of the State Board of Health. The editors are not responsible for unsolicited manuscripts. Copy for publication must reach Jacksonville not later than first day of month preceding date of issue.

OPEN LETTER

Dr. W. A. McPhaul
State Health Officer
Jacksonville, Florida

Dear Doctor McPhaul:

Why hasn't my county full-time local health service? I hear that 17 other counties have health units and I would like to know how my county can get one. Does the state decide which counties get full-time local health service, or must the county make the first move? If so, who in the county asks for it, the people or the commissioners or both?

Who finances the county health units, the state or the county? If the county is responsible must they bear the entire cost or only part of it?

My county is too broke to pay for any elaborate local health service but some of us have been checking over the expenditures of the past few years, and we believe it would be cheaper to operate a full-time local health service that prevents disease and unnecessary deaths, than it has been to lose tax money going and coming. By "going and coming" I mean losing assessments from folks too sick to earn money to pay taxes, and at the same time paying out more tax money to treat those same folks until they're either well enough to work again or else die and are our responsibility to bury.

That's why we've decided we need a full-time local health unit. Please tell us how to go about getting one.

A Responsible Citizen.

These Questions will be Answered
in
August HEALTH NOTES

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HEALTH NOTES

LOCAL HEALTH SERVICE

VOL. 31 No. 8

AUGUST 1939

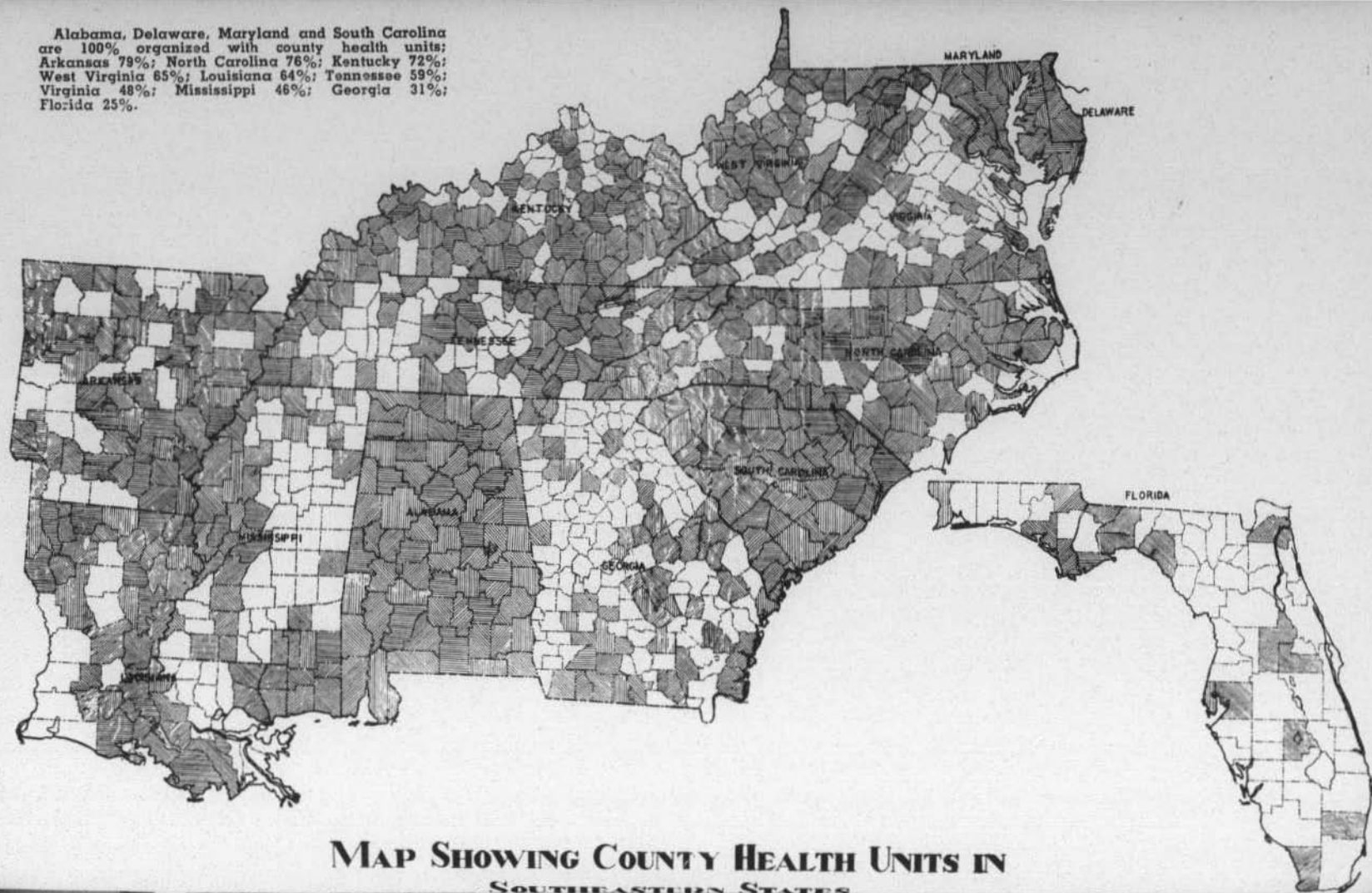
STATE BOARD OF HEALTH

OFFICIAL PUBLICATION

JACKSONVILLE, FLORIDA

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Alabama, Delaware, Maryland and South Carolina
are 100% organized with county health units;
Arkansas 79%; North Carolina 76%; Kentucky 72%;
West Virginia 85%; Louisiana 64%; Tennessee 59%;
Virginia 48%; Mississippi 46%; Georgia 31%;
Florida 25%.



**MAP SHOWING COUNTY HEALTH UNITS IN
SOUTHEASTERN STATES**

FLORIDA HEALTH NOTES

Volume 31

• Number 8

• August

• 1939

Entered as Second Class Matter, Oct. 27, 1921, at postoffice, Jacksonville, Fla., Act of Aug. 24, 1912

Health Officer's Patient Is The Community Itself

W. A. McPHAUL, M. D.

State Health Officer

Local health officer must be as familiar with his community as private physician is with the background of patients, says state health officer

THE great and irreplaceable value of the private physician is his closeness to his patient. He knows not only about the patient himself but his family and his complete environment. All these mental and physical symptoms which might have a bearing on the current illness and point a way toward effective treatment in the shortest possible lapse of time, are well known to the doctor.

As with personal health, so with community health. To efficiently serve the health needs of a community, the local health officer must have intimate knowledge of that community, its people, its organizations, its financial status. He must know about its schools, its water supply, the sewage disposal equipment. He must know where the community obtains its milk supply, its meat and other perishable foods.

The local health officer must know such things as the topography of his territory, the amount of rainfall, the soil conditions, all of which have an important bearing on the existence of certain diseases. He must know what diseases the people of the community die from and what diseases and conditions take toll in illness. The statistics are used by him as a measuring rod for his activities.

The local health officer's patient is the community. Personal and well-informed interest is the service which only a full-time health department can give to a county.

The services of a full-time county health unit are not spasmodic but continuous. Therefore, they function toward the permanent betterment of the community and its people.

Proving It Is Cheaper To Prevent Than Cure

Hypothetical county of 20,000 population is used to compare cost of health unit's present service with cost of disease prior to unit's establishment

THE oft-repeated statement "it is cheaper to prevent disease than to cure it" has reached the point where enlargement and explanation is in order. Therefore, this article will attempt to prove the statement by taking a hypothetical county, comparing the cost of disease prior to the establishment of a health unit and after it has been operating for a period of time.

The population of our hypothetical county is 20,000 to 22,000. Statistics show that county has reduced its total death rate 47% since the installation of a county health unit. Infant mortality dropped from 115 deaths per 1000 live births before the unit, to 66 per 1000 live births after the unit had been operating 14 years. There was a 75% decrease in deaths from diarrhea and enteritis, a 74% decrease in deaths from tuberculosis.

The year before the unit was established there were 6 deaths from diphtheria. Ten years later there was only one death from diphtheria and that of a child whose parents refused the administration of toxoid just six months prior to death.

The unit had been in operation 10 years before this remarkable record was achieved, for such work is gradual. It is generally agreed that no health unit can begin to show improvement in disease and death rates until it has been operating five years.

The complex problem of evaluating the cost of chronic disease occurring in the prime of life is difficult because of extenuating circumstances and the fact that a person originally taken ill with one disease may develop complications which eventually result in death and are recorded as fatality from an entirely different disease. However, it has been possible to estimate that % of the deaths among persons in the prime period of life, namely 20 to 65 years of age, are due to such diseases. And that doubtless the high toll of these chronic diseases will be greatly reduced in years to come by the results of preventive health work being done among the children of today who will be the adults of tomorrow.

The table that follows has been carefully assembled, using as a yardstick standard disease and death costs:

Health Statement

THE annual cost of a minimum-staffed health unit for a county of 20,000 to 22,000 population is approximately \$10,000. Of this amount 50% to 25% is financed by the State Board of Health, 50% to 75% by the county itself and 25% to 33% by the United States Public Health Service and U. S. Children's Bureau. The exact ratio varies according to the county's ability to pay. Some counties have a high per capita wealth, others a low.

In a \$10,000 minimum cost health unit, the money is apportioned somewhat as follows:

\$3,600 Health Officer (An M.D. with public health training)
1,800 Sanitary Officer (With public health training)
1,800 Registered Nurse (With public health training)
900 Secretary-Clerk
1,900 Miscellaneous

\$10,000

Now compare the health unit maintenance cost with a rough extremely conservative estimate of disease and death tolls prior to the installation of the unit.

5 deaths from malaria @ \$10,000 valuation standard set by government on every life	\$50,000
1,000 cases of malaria of 7 days duration at loss of \$3.00 per day minimum wage	21,000
13 deaths from tuberculosis	130,000
65 cases tuberculosis—	
1. Loss of salary (\$900 per year minimum)	58,500
2. Treatment, hospitalization, etc. (\$3,000 per case over 5½ year period, average duration of case of tuberculosis)	195,000
295 School children (5% of 5,808 enrollment) repeating grades because of sickness from hookworm; \$48 is cost per child per year in Florida schools	13,939
103 Cases hookworm among white adults at loss of \$3.00 per day minimum wage per person per year	92,700
2,689 Total cases syphilis, resulting in estimated loss of 10 days' work per case per year for simple, uncomplicated cases	59,930
615 Cases (white) @ \$3.00 per day	\$18,450
2,698 Cases (Colored) @ \$2.00 per day	\$41,480
	\$59,930
15 Cases of either central nervous system or cardio-vascular syphilis (heart and blood vessel disease) requiring 97.3 hospital days per patient @ \$1.25 per day or a total cost per year	1,824
7 Cases central nervous system syphilis (colored) requiring 160 days hospitalization per patient, totaling 1120 hospital days at \$2 per day wages lost	2,240
4 Cases central nervous system syphilis (white) requiring 166 days hospitalization per patient, totaling 664 hospital days at \$3 per day wages lost	1,992
7 Cardio-vascular syphilis (colored) requiring 25 hospital days per patient, totaling 175 hospital days at \$2 per day wages lost	350
1 death (white) syphilis (white) @ \$10,000 valuation per life	10,000
5 deaths (colored) syphilis	50,000
1 burial expense (white)	300
5 burial expenses (colored)	1,500

Total cost major diseases per year, county 20,000 population \$689,275

Time and space does not permit tabulation cost of many other diseases such as diphtheria, smallpox, maternal deaths, whooping cough, et cetera which are largely preventable.

Outstanding Achievements Recorded By Florida Units

A. B. McCREARY, A. B., M. D.

Director District and County Health Work

**In addition to generalized public health program,
most units devote much time to special campaigns**

IN formulating its initial program the new county health unit always attacks first those problems which are most seriously affecting the health and economic condition of the residents. This concentration of effort upon specific problems is not undertaken to the exclusion of all other work. It is carried on in addition to the generalized activities of disease prevention. In other words they major in the most serious disease problems, just as a student majors in a particular subject at school in addition to other credits required.

Escambia County, with a high death rate from malaria, began an intensive campaign against that disease several years ago.

Because of the interest exhibited by Escambia county citizens and government officials, the Rockefeller Foundation has established in that county a malaria demonstration project. Such marked progress has been made during its brief existence that other counties are sending public health officials to Escambia for courses in malaria control prior to establishing a similar project in their own county.

Gadsden County is the first to report inauguration of a definite malaria control program pattern-

ed after the one being demonstrated by the State Board of Health. Before embarking upon their project the Gadsden County Health Unit held a malaria control seminar under the direction of Dr. John E. Elmendorf, Jr., malariologist with the State Board of Health.

The seminar was attended by county health officers from Bay, Franklin-Gulf, Leon counties, as well as by several members of the State Board of Health staff.

Following these seminars, Gadsden began making preliminary surveys of their county to determine the location of all potential breeding places, routine dipping of these places, identification of all adult, larval and pupae form mosquitoes caught in the area, running of levels to establish possibilities of drainage; splenic examinations to establish location of malaria cases and comparison of various sections of concentration of cases; preparation of spot maps for tabulating all this information.

In Hillsboro county, it is not malaria but maternal and child health which has demanded special attention. As a result of coordinated programs by the medical profession, Tampa Health De-

partment and County Health Unit, the maternal death rate of Hillsboro county is now the lowest in its history. There were 5 such deaths in 1938 as against 15 in 1937.

In Leon county, as in many others, syphilis and gonorrhea are the most pressing current problems. The health unit does not confine its anti-syphilis program to clinics alone, but devotes a great deal of time to follow-up and check-up work since cessation of treatment in this particular disease renders valueless all previous effort to cure or arrest it.

In Monroe county, with its large tourist traffic, the health unit feels its major problem is the sanitary supervision of all restaurants, bars and grocery stores. Accordingly, after considerable effort expended through several changes of administration, an ordinance has been adopted by the City of Key West, requiring inspection and grading of all food handling establishments.

The Broward County Health unit has done a notable piece of work in its campaign for improved sanitation in all eating and drinking places. They have been instrumental in adopting and enforcing the U. S. Public Health

Service standard milk ordinance, so that Broward county is now rated as having one of the best milk supplies in the Nation.

Orange county has concentrated on syphilis and gonorrhea control. That county is outstanding as an example of what can be accomplished when the medical profession, the people and the health unit work harmoniously for the common good.

The work in Pinellas county has been outstanding in that it is one of the best balanced public health programs existant in a county health unit. Through their efforts in conjunction with those of the dental society, over a period of years, children of Pinellas county are now rated as having the healthiest teeth of any county on record with the U. S. Public Health Service. The unit's comprehensive sanitation project has also resulted in one of the lowest hookworm rates in the state.

Taylor County is making a good record with its monthly checking of individuals employed in dance halls and road houses to discover early cases of syphilis and gonorrhea and place them under treatment.

Reduction of tuberculosis rates has been an outstanding piece of work in the majority of county unit. This is being accomplished through education and the use of Burr Cottages. Hookworm, typhoid and other alvine discharge diseases have been markedly reduced through the various privy projects inaugurated in various counties, notably Lake, Jackson, Franklin-Gulf as well as others. It is no longer a question of whether a county can afford a health unit, it is a question of whether the county can afford to be without a health unit.

COUNTY PHYSICIANS' RELATION TO UNIT

In those units having county physicians at the time the County Health Unit is established the director of the unit can and does work very closely with the county physician. In fact, they sometimes occupy adjoining offices.

The essential difference between the work of the county physician and county health unit director is that the physician treats indigent sick, while the health unit director is charged with the duty of preventing disease. Prevention is accomplished in many ways—through elimination of insanitary sewage disposal, education of parents in avoiding those conditions that might subject themselves and their children to contraction of disease, et cetera. For detailed information on this subject, see the article on "What to Expect from a County Health Unit" on page 90-91.

Detailed Health Survey of County Precedes Every Unit

Upon request from citizens, medical society and others in the county who are interested, State Board of Health will make extensive health survey

SURVEYS of existing disease and sanitation problems in a county preparatory to the establishment of a county health unit, is comparable to the engineering survey made prior to inaugurating any major construction work. In both instances it is absolutely essential that workers know where, how and along what lines they are going to erect the new structure.

Detailed county health surveys are made by the Florida State Board of Health staff upon request of a sufficient number of prominent citizens, both lay and medical, in the particular county in question. The State Board of Health policy does not permit them to make such surveys, however, unless an invitation is extended by the county itself.

Surveys are a prerequisite for the establishment of health units because they are the foundation upon which is built the disease prevention program to be carried on by the unit after it begins operation. From the survey, also, it is possible to determine the size staff and budget needed to satisfactorily carry on that program.

After the survey is completed, its findings are mimeographed for distribution to all interested citizens. The report is extensive and covers the county health situation in detail.

County surveys offer comprehensive analysis of the following subjects, all of which must be considered when planning any disease prevention activity:

Population according to race, sex, age groups and distribution, interpreted geographically over a period of years.

Governmental personnel and control, including those commissions or committees legally responsible for operation of all county institutions.

Statistics on number of practicing physicians, hospitals, incorporated towns within the county, with names of mayor and councilmen.

Analysis of climate, soil; commercial and economic background; birth and death records over a period of years by race and age.

Lists of civic club presidents, vital statistic registrars.

Epidemiological record of diseases reported, in counties where reports are being turned in by local physicians.

Report on existing facilities for maternal and infant hygiene instruction, school hygiene, dental hygiene, county nursing service.

Lists of midwives; lists of principals of all schools in the county,

FLORIDA HEALTH UNIT LAW

(In Abstract Form)

SECTION 1. The several counties of the State of Florida, and cities therein, are hereby authorized to cooperate with the State Board of Health in the establishment and maintenance of full-time local health units for the control and eradication of preventable diseases, and to inculcate modern scientific methods of hygiene, sanitation and the prevention of communicable diseases.

SECTION 2. To enable such counties to execute the purpose of this Act, every county in the State with a population exceeding 100,000 according to the last State Census, is hereby authorized to levy an annual tax of not exceeding $\frac{1}{2}$ mill, and every county with a population exceeding 40,000 and not exceeding 100,000 is hereby authorized to levy an annual tax of not exceeding 1 mill and every county with a population not exceeding 40,000 is authorized to levy an annual tax of not exceeding 2 mills on the dollar on all taxable property in such county, the proceeds of which, when collected, shall be paid to the State Treasurer for the account of the State Board of Health. Such funds in the hands of the State Treasurer shall be known as the full time health unit funds of the county by which such funds were raised. Said funds shall be expended by the State Board of Health only for the purpose of carrying out the intent of this Act in such county. The State Board of Health shall render to the County Commissioners of any such county, semi-annual financial statements.

SECTION 3. County Commissioners of every county are hereby authorized to agree with the State Board of Health upon the expenditures of its funds. The State Board of Health is further authorized to agree with the United States government through its duly authorized officials for the allocation and expenditure by the United States of federal funds in such full-time health units.

SECTION 4. The personnel of the minimum full-time local health unit shall consist of a director, who shall be a doctor of medicine with public health training, a public health nurse, a public health sanitary officer and a clerk. Such employees must devote their full time to the health unit.

SECTION 5. It shall be lawful for two or more counties to combine in the establishment and maintenance of a single full-time local health unit.

(Effective June 4, 1931. Chapter 14906 No. 268 General laws of 1931.
Full text available free from State Board of Health.)

both colored and white; enrollment of all schools by grades.

Detailed report on adequacy of water supply, sewage disposal, regulations for sanitary handling of food and milk.

List of dairymen with addresses.

Extensive sanitary survey of all schools with report, by schools, on the condition of water supply, lavatories, sewage.

Analysis of housing conditions giving number of homes, business establishments, rooming

houses, apartments, together with percentage new and percentage vacant.

Survey of garbage disposal, tourist camps, mosquito problem to determine whether it is confined to pest mosquitoes or whether malaria and other disease-carrying mosquitoes are present.

Recommendations for coping with the above problems; submission of a proposed budget setting forth appropriation necessary to establish a health unit capable of handling the problems.

What a Health Unit Should Do

The investigation of communicable diseases such as syphilis, gonorrhea, malaria, infantile paralysis, meningitis, typhus fever, undulant fever, leprosy, plague, tuberculosis, hookworm, diphtheria, typhoid, with specific regard to instituting measures for preventing the spread of these diseases.

Detailed and periodic investigation and supervision of general sanitary conditions, particularly as related to water supply and sewage disposal.

Supervision of production, pasteurization and distribution of milk supplies as they relate to sanitation.

Inspection of industrial plants to eliminate any health hazards to employees.

Examination of school children for the discovery of communicable diseases or physical defects. Notification to parents of the findings of these examinations and referral to private physicians, or in the case of indigents, to any available clinic for treatment.

Dental examination of school children periodically in conjunction with local dental society. Notification to parents of findings, with recommendations for correction by private dentist or clinic. Every dental program should include courses in balanced diets that aid in the growth and maintenance of healthy teeth.

Nutrition and dental hygiene as integral parts of every county health program.

Health conferences for infants, pre-school children and their mothers who would not otherwise have medical supervision.

Clinics for the diagnosis and treatment of syphilis and gonorrhea in those patients unable to pay.

Clinics for the administration of immunization against certain communicable diseases now known to be preventable via either vaccination or injection of a toxoid. These include smallpox, diphtheria, typhoid fever.

Investigation of complaints as to health and sanitary conditions, including housing, garbage collection, et cetera.

ould Do For a County

Clinics for the early diagnosis of tuberculosis and follow-up service on active cases, including follow-up of all persons with whom active cases may have come in contact. Public health nursing service in the home to include teaching of both patient and family in the care and prevention of the spread of tuberculosis. Assistance in institutional care where that is possible.

■

Prenatal and post-natal conferences for the instruction of mothers in the proper care of themselves and their baby. Blood tests for syphilis on all expectant mothers otherwise unable to pay.

■

Public health nursing, which includes innumerable services, such as clinics, school service, health education and home visits where instruction is given in carrying out the physician's orders or the regulations of the health department.

■

Analysis and recording of statistics of births, deaths, marriages, divorces and disease incidence in the community. These are necessary equipment for building future programs and evaluating the effectiveness of past programs.

■

A continuous program of health education, which means the dissemination of disease prevention information to everyone in the community, adults as well as children. Working through newspapers, radio, clubs, schools and movies, the health officer, public health nurses and sanitarians communicate to citizens the means of controlling and in many cases completely eliminating certain health problems.

■

Distribution of free supplies from state health department to private physicians. These include smallpox and typhoid vaccine, diphtheria toxoid, tuberculin, diphtheria antitoxin, tetrachloroethylene for treating hookworm, insulin for indigent diabetics, arsenicals and bismuth for treating venereal diseases, free silver nitrate to prevent blindness in newborn babies. Anti-rabic treatment for indigents.

■

Child guidance and psychology clinics should be part of every county health unit activity. Although there are no mental hygiene programs being carried on by Florida health units at the present, the State Board of Health hopes there will be some in the near future.

County Unit Best Adapted For Local Health Service

Citizens of county must make first overture in establishment of health unit—State Board of Health cannot assist until asked by county

A COUNTY health unit, or department, is the most efficient means of preventing and controlling disease of a public health nature because such diseases are more economically combatted on a community basis than as a problem of the individual.

The staff of a county health unit works unceasingly to prevent the occurrence and spread of diseases which, if not controlled, might reach such serious proportions as to impair the life and economic condition of the entire population. Founded and operated according to approved public health practices, the county health unit devotes its full time and energy to serving all the citizens of the county, reaching out into the remote rural settlements as well as into the nearby townships.

Public health is a FULL-TIME JOB which in its modern interpretation means much more than mere quarantining of current cases of communicable diseases. ANY PART-TIME HEALTH SERVICE IS MERELY AN EXPENSIVE AND INEFFECTIVE BROOM THAT SWEEPS BACK THE TIDE BUT NEVER MAKES ANY HEADWAY.

Counties having no full-time health unit sometimes have part-time doctors and nurses or else depend solely upon the emerg-

ency services from the Health District force maintained by the State Board of Health. These districts have been a necessary attempt to erect a stop-gap until such time as enough money is appropriated to establish county health units in all of Florida's 67 counties.

The State Board of Health is the first to admit that this service is strictly of an emergency type. They admit it is humanly impossible for three public health officials (a doctor, nurse and sanitarian) to render more than emergency service when they must minister to as many as 300,000 persons scattered over sparsely populated areas encompassing hundreds of square miles.

In 50 of Florida's 67 counties, District Health service is the only health service available. Tampa, Miami and Jacksonville have full time city health departments but in the case of Miami, where there is no county health department, people living in suburbs of the city do not receive the protection of the city health staff because city health departments cannot operate outside corporate city limits.

The local health unit law was passed in 1931 authorizing Florida counties to cooperate with the State Board of Health in establishment and maintenance of local health units. It permits coun-

ties to levy and collect special county taxes for health units and authorizes two or more counties to agree upon joint action in the establishment of a cooperative health unit.

The first step necessary to establish a unit is the support of prominent individuals in the county, including lay persons, doctors, dentists and members of civic organizations. They should appear before the county commissioners to request the establishment of the unit and, at the same time request the State Board of Health to make a detailed survey of public health problems within the county, together with recommendations for meeting those problems and a proposed budget covering equipment and staff necessary to adequately fulfill the recommendations.

The State Board of Health will cooperate, when requested by citizens of the county, in supplying speakers to appear before the commissioners and other groups interested in the matter of a county health unit.

The annual cost of a minimum staffed full-time county health unit will range from \$7500 to \$10,000 for a county of 20,000 to 35,000 population. The cost increases according to population and the extent of the health problem to be met.

One-third to one-half the cost is met by the State Board of Health and the U. S. Public Health Service. The amount of outside

assistance depends upon the ability of the county to pay. However, the county's appropriation must be shown first, as an indication of good faith, before either state or federal funds are forthcoming. Law requires federal funds to be disbursed through the State Board

STATE-COUNTY RELATION

Certain specific services which county units are unable to render economically are provided locally by the State Board of Health, although the duties of state health departments are essentially those of an advisory and supervisory organization. They cannot and should not do the work of full-time local units any more than the Federal government should undertake the running of state governments.

The specific state services that are cheaper to render directly from the state department to the local unit are: Advisory and consulting services on tuberculosis and dental health; collection of vital statistics; laboratories at Tampa, Miami, Pensacola, Tallahassee and Jacksonville; inspection of shellfish production sources, municipal water supply, sewage and drug stores; surveys of certain diseases; health education materials.

of Health, not directly from Washington.

The minimum staff for the smallest full-time county health unit is one physician especially trained in public health who acts as director of the unit, one public health nurse, one sanitary officer and one secretary-clerk.

Larger counties need additional public health sanitary officers and public health nurses.

All personnel of the Health Unit is employed by the County Commissioners, subject to the approval of the State Board of Health. The advice and assistance of the local medical society is always solicited.

Florida Has Fewest Units Among 14 Southern States

Florida's present health officer secured passage of first health unit law in U. S.—14 of Florida's 16 units established during his administration

FLORIDA occupies an unique position in the history of county health units due to the fact that the state health officer, Dr. W. A. McPhaul, was instrumental in creating the first county health unit law in the United States. This law permitted counties to levy millage for public health service and was passed back in 1911 when Dr. McPhaul was county health officer of Robinston County, North Carolina.

About four years ago Dr. McPhaul became health officer of the state of Florida. During the past three years 14 of Florida's 16 county health units have been organized.

Yet, Florida still has fewer county health units (16 serving 17 of her 67 counties) than any of the 14 Southern states. Four of these states, namely, Alabama, South Carolina, Maryland and Delaware are 100 per cent organized with county units. All of the others have more county units than Florida.

It is possible that this condition can be explained by the fact that the state appropriation for public health has remained stationary since 1933. The county units organized under Dr. McPhaul's administration have been made pos-

sible through additional funds allocated to Florida from the U. S. Public Health Service and the U. S. Children's Bureau.

Through the years, Dr. McPhaul has maintained his belief in full-time local health service as the only type of health protection that is adequate. The need for health units on a county basis first became apparent shortly after the turn of the century. It was then that city dwellings began expanding beyond the corporate city limits. This population, concentrated in suburbs, needed health protection just as much as the population within the city limits. Yet they were prohibited by law from receiving protection from the city health officer, who had his hands full within the corporate limits.

What was true at the turn of the century has been magnified a thousandfold since that time. The county health unit law permits people in suburbs, small towns and rural areas to acquire their own health officer and their own health protection machinery.

Areas that do not have this form of protection do not have 100 per cent armament against insanitation, pestilence and disease.

NEW BOOKS

Available From the
State Board of Health
Library

- DISEASES OF THE NOSE, THROAT AND EAR**, by W. L. and H. C. Ballenger, Phila., Lea & Febiger, 1938.
- MANUAL OF DETERMINATIVE BACTERIOLOGY**, by D. H. Bergey, Balt., Williams & Wilkins, 1939.
- MEDICAL MICROBIOLOGY**, by K. L. Burdon, N. Y., Macmillan, 1939.
- MEDICAL MYCOLOGY**, by C. W. Dodge, St. Louis, Mosby, 1935.
- BIOGRAPHY OF THE UNBORN**, by Margaret S. Gilbert, Balt., Williams & Wilkins, 1938.
- TEXTBOOK OF EMBRYOLOGY**, by H. E. Jordan and J. E. Kindred, N. Y., Appleton-Century, c1937.
- CLINICAL AND EXPERIMENTAL USE OF SULFANILAMIDE, SULFAPYRIDINE AND ALLIED COMPOUNDS**, by P. H. Long and E. A. Bliss, N. Y., Macmillan, 1939.
- NEWER KNOWLEDGE OF NUTRITION**, by E. V. McCollum, N. Y. Macmillan, 1939.
- SYPHILIS**, edited by F. R. Moulton, Lancaster, Science Press., c1938.
- ANATOMY OF THE HUMAN LYMPHATIC SYSTEM**, By Henri Rouviere, Ann Arbor, Edwards, 1939.
- NEW-BORN INFANT**, by E. L. Stone, Phila., Lea & Febiger, 1938.
- ABORTION—SPONTANEOUS AND INDUCED**, by Taussig, St. Louis, Mosby, 1936.
- PUBLIC HEALTH LAW**, By J. A. Tobey, N. Y., Commonwealth Fund, 1939.
- IMMUNITY**, by Hans Zinsser, J. F. Enders and L. D. Fothergill, N. Y., Macmillan, 1939.
- WATER PURIFICATION FOR THE PRACTICAL MAN**, by C. R. Cox, N. Y., Case-Shepherd-Mann, c1938.
- HEALTH INSURANCE WITH MEDICAL CARE**, by D. W. Orr, N. Y., Macmillan, 1938.
- NATURAL HISTORY OF POPULATION**, by Raymond Pearl, N. Y., Oxford U. Press, 1939.
- PRACTICAL MICROBIOLOGY AND PUBLIC HEALTH FOR STUDENTS OF MEDICINE**, by B. W. Sharp, St. Louis, Mosby, 1938.
- DERMATOLOGY AND SYPHILOLOGY FOR NURSES**, by J. H. Stokes, Phila., Saunders, 1937.
- GENUINE WORKS OF HIPPOCRATES**, trans. by Francis Adams. Balt., Williams & Wilkins, 1939.
- SOCIAL SERVICES AND THE SCHOOLS**, Educational Policies Commission, Wash, 1939.
- NURSERY YEARS**, by Susan Isaacs, N. Y., Vanguard, c1938.
- HEALTH INSURANCE: THE NEXT STEP IN SOCIAL SECURITY**, by L. S. Reed, N. Y., Harper, 1937.
- ALCOHOL: ONE MAN'S MEAT**, by E. A. Strecker and F. T. Chambers, Jr., N. Y., Macmillan, 1938.
- ALGAE: THE GRASS OF MANY WATERS**, by L. H. Tiffany, Springfield, Thomas, c1938.
- PRACTICE IN PRESCHOOL EDUCATION**, by Ruth Updegraff, N. Y., McGraw-Hill, 1938.
- NEEDED POPULATION RESEARCH**, by P. K. Whelpton, Lancaster, Science-Press, 1938.

BOOK REVIEWS

These books available from the State Board of Health Library

Health Insurance

The next step in social security.

By Louis S. Reed, N. Y., Harper, 1937, Price\$3.00

A worthy addition to the fast-growing literature on health insurance and related problems, this book definitely makes a case for re-adjustment of the administration of medical care and payment.

There is little that is new here, but the value of the book lies in the method of presentation. All the arguments against health insurance, or some planned method of medical payment, are clearly stated and discussed. Voluntary insurance as against compulsory insurance, and in conclusion a definite program, are outstanding chapters.

Interest in either side of this much discussed problem will merit careful consideration of this book.—E. H. B.

Alcohol

One Man's Meat. Edward A. Strecker and Francis T. Chambers, Jr., N. Y., Macmillan, 1938, Price\$2.50

Some drink—and some don't. The authors of this book imply that the benefits of alcohol are doubtful and the evil considerable. However, they do draw a distinct line between the "normal drinker" and the "abnormal" or "alcoholic". The need for "unemotional, interesting, and above all, true information" about the use and abuse of alcohol is stated forcibly and frequently throughout the book.

The psychology of alcoholism occupies one-half the book—and

the other portion deals with treatment of alcoholism.

The authors are associated with the School of Medicine of the University of Pennsylvania and bring to bear both scientific knowledge and years of practical experience. Illustrative case material is based on the authors' recent experience with alcoholics.

C. R. A.

Margaret Sanger

An autobiography. N. Y., Norton, c1938\$3.50

"... In an era when huge fortunes have been spent in alleviating human misery progress has been painfully slow. Countless women still die before their time because the bit of knowledge essential to very life is still not theirs." So writes Margaret Sanger in her autobiography—an autobiography important not so much as a life history as it is of the birth control movement in the United States.

As a nurse on the lower east side in New York, she became acquainted with women in the submerged classes and came to know the real cause of their plight destitution linked with excessive childbearing. Through the years that followed she sought to democratize birth control.

It was a great undertaking for this small, slight woman, yet she braved the mobs, the policemen, the courts, the jails in order that birth control might seep down until it reached the strata where the need was greatest. Hers is a story of "service rendered."

—K. B. K.

BUREAU OF VITAL STATISTICS

EDW. M. L'ENGLE, M. D., *Director*

MALARIA

Deaths from Malaria and Rates per 100,000 Population, by Color,
Florida, 1934-1938

Year	TOTAL		WHITE		COLORED	
	Deaths	Rate	Deaths	Rate	Deaths	Rate
1938	166	9.8	72	6.0	94	19.2
1937	205	12.3	100	8.4	105	21.7
1936	349	21.3	158	13.6	191	40.1
1935	331	20.5	196	17.1	135	28.8
1934	445	28.1	235	20.9	210	45.5

Deaths from Malaria and Rates per 100,000 Population, by Color and by Counties,
Florida, 1938

COUNTIES	TOTAL		WHITE		COLORED	
	Deaths	Rate	Deaths	Rate	Deaths	Rate
State	166	9.8	72	6.0	94	19.2
Alachua	5	13.3	2	9.7	3	17.8
Baker	0	—	0	—	0	—
Bay	3	15.2	1	6.1	2	58.8
Bradford	2	22.7	2	31.2	0	—
Brevard	0	—	0	—	0	—
Broward	6	24.2	3	18.3	3	35.7
Calhoun	3	33.3	3	41.1	0	—
Charlotte	0	—	0	—	0	—
Citrus	3	53.6	0	—	3	176.5
Clay	0	—	0	—	0	—
Collier	1	16.7	0	—	1	35.7
Columbia	3	19.1	1	10.4	2	32.8
Dade	2	1.0	2	1.2	0	—
DeSoto	0	—	0	—	0	—
Dixie	9	154.2	3	81.5	6	278.8
Duval	7	3.8	2	1.6	5	7.7
Escambia	2	3.4	0	—	2	13.5
Flagler	0	—	0	—	0	—
Franklin	2	29.9	1	22.2	1	45.5
Gadsden (Ex.)	6	22.2	2	18.2	4	25.0
State Hospital	0	—	0	—	0	—
Gilchrist	1	23.8	0	—	1	142.9
Glades	1	37.5	0	—	1	167.5
Gulf	0	—	0	—	0	—
Hamilton	5	50.5	3	50.8	2	50.0
Hardee	0	—	0	—	0	—
Hendry	3	78.9	1	32.3	2	285.7
Hernando	1	17.2	0	—	1	62.5
Highlands	0	—	0	—	0	—
Hillsboro	3	1.9	2	1.5	1	3.3
Holmes	4	26.0	4	27.6	0	—
Indian River	0	—	0	—	0	—
Jackson	11	29.5	6	25.4	5	36.5
Jefferson	3	22.1	1	25.0	2	20.8

Deaths from Malaria and Rates per 100,000 Population, by Color and by Counties,
Florida, 1938—(Continued)

COUNTIES	TOTAL		WHITE		COLORED	
	Deaths	Rate	Deaths	Rate	Deaths	Rate
Lafayette	1	23.6	1	27.0	0	.....
Lake	3	9.6	3	13.5	0	.....
Lee	0	.....	0	.....	0	.....
Leon	5	17.6	2	17.4	3	17.8
Levy	8	60.6	2	25.6	6	111.1
Liberty	1	25.9	0	.....	1	89.8
Madison	8	44.4	3	34.1	5	54.3
Manatee	1	4.3	0	.....	1	16.4
Marion	5	16.0	3	18.4	2	13.3
Martin	0	.....	0	.....	0	.....
Monroe	0	.....	0	.....	0	.....
Nassau	1	10.9	0	.....	1	29.4
Okaloosa	2	15.7	1	8.5	1	111.1
Okeechobee	0	.....	0	.....	0	.....
Orange	0	.....	0	.....	0	.....
Osceola	0	.....	0	.....	0	.....
Palm Beach	2	3.7	0	.....	2	11.1
Pasco	2	17.2	1	10.2	1	55.6
Pinellas	0	.....	0	.....	0	.....
Polk	4	4.5	1	1.4	3	16.0
Putnam	1	5.4	1	9.6	0	.....
St. Johns	2	11.4	1	8.5	1	17.1
St. Lucie	0	.....	0	.....	0	.....
Santa Rosa	1	6.1	1	6.9	0	.....
Sarasota	1	6.8	0	.....	1	26.3
Seminole	4	16.5	0	.....	4	32.8
Sumpter	6	59.9	4	56.6	2	67.7
Suwannee	3	16.9	2	17.1	1	16.7
Taylor	6	54.1	4	54.3	2	53.7
Union	1	11.4	0	.....	1	29.4
Volusia	4	7.2	2	5.3	2	11.2
Wakulla	2	31.3	0	.....	2	76.9
Walton	3	21.7	0	.....	3	135.6
Washington	3	22.6	1	9.8	2	64.5

Malaria			Malaria			Malaria		
Precipitation	Death Rate		Precipitation	Death Rate		Precipitation	Death Rate	
1917	41.3	29.9	1925	51.8	16.9	1933	55.3	24.0
1918	50.3	24.0	1926	60.0	17.3	1934	52.9	28.1
1919	57.5	46.0	1927	40.8	15.6	1935	52.4	20.5
1920	57.7	35.5	1928	60.3	28.1	1936	57.6	21.3
1921	44.9	22.2	1929	59.2	32.8	1937	58.5	12.3
1922	57.2	22.7	1930	59.9	22.4	1938	43.2	9.8
1923	50.2	25.7	1931	43.4	13.6			
1924	61.9	21.0	1932	53.0	15.2	Average	23.6	53.6

FLORIDA HEALTH NOTES

ESTABLISHED 1890
JACKSONVILLE, FLORIDA

Official Publication State Board of Health

VOLUME 31 ■ NUMBER 8 ■ AUGUST ■ 1939

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Florida Health Notes, published monthly on the 25th of the month by the Florida State Board of Health. Publication office, Jacksonville, Fla., headquarters of the State Board of Health. The editors are not responsible for unsolicited manuscripts. Copy for publication must reach Jacksonville not later than first day of month preceding date of issue.

IS YOUR CHILD READY?

Some parents who are otherwise very good and cautious parents display an amazing amount of either indifference or ignorance in the matter of preparing their children for school.

Many parents seem to think the only preparation necessary for the new school term is pencil, paper and as many new clothes as the family budget will permit.

Most parents fail to realize the great importance, indeed the necessity, for complete physical inventory of their children prior to entering school.

Whether children are entering school for the first time or whether they are being sent off for the final year of college, parents will find a wealth of useful information in



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DL. 31 No. 9

SEPTEMBER 1939

OFFICIAL PUBLICATION

STATE BOARD OF HEALTH

JACKSONVILLE, FLORIDA

In Memoriam



WILBUR A. McPHAUL, M. D.

1879-1939

*When death took DR. McPHAUL, Florida State Health Officer,
on August 1, the career of one of public health's most
distinguished exponents was brought
to an untimely end.*

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Medical Treatment Not School's Responsibility

LEIGH F. ROBINSON, M. D.

President, Florida Medical Association, Ft. Lauderdale

School should provide (1) Sanitary environment (2) Communicable disease control program (3) Healthfully balanced curriculum (4) Health instruction (5) Efficient use of public school funds.

THE school has certain definite responsibilities for the health of the school child. It is incumbent on school officials to provide, first, proper wholesome surroundings which include modern building and sanitary standards. Second, necessary facilities for prevention, spread and immunization against communicable diseases. Third, a well balanced curriculum with thought against overloading and proper balance between mental and physical activities. Fourth, adequate instruction in healthy living, and, fifth, against the waste and misuse of public funds collected for educational purposes.

Obviously these responsibilities require a program big enough to take all the time and tax all the ability of the most conscientious and capable school administrators. There is no necessity for going beyond the proper responsibilities of the school into fields which do not properly belong to the school.

Medical treatment should not be undertaken by the school. Except for emergency first aid, medical treatment is a proper function of the family in

cooperation with the family physician. The multiplication of clinics for medical and dental treatment in certain schools is not evidence of progress in public health; it is rather a concession to expediency and an acknowledgment that constructive community cooperation has not been developed.

The schools in any community should have access to consultation with a medical adviser. In large communities this may be the health officer or a health department physician assigned to school work. It may be a physician employed by the schools. In smaller communities the schools may well turn to the county medical society and ask for an advisory committee. This school medical adviser should be what his name indicates, an adviser with respect to the school environment and curriculum, the health education plan and other special considerations relating to health. He should prescribe and put into effect a periodic physical examination for the school children, devising and maintaining the necessary records, having the examinations made by local family physicians whenever possible and provid-

ing examinations gratis for those unable to provide their own. He should encourage the carrying out of corrections of discovered defects and to a limited extent should carry out demonstrations of physical examinations for educational purposes.

The school medical adviser should encourage immunization against smallpox, diphtheria and in some localities typhoid. Wherever possible, such immunizations should be carried out by the family physician and should be paid for by the community only in the case of those unable to pay. The records should be kept in the possession either of the health department or of the schools, depending on local organizations. The school medical adviser should supervise luncheon and cafeteria menus in the schools where such are provided; he should take all necessary measures by observation, inspection, exclusion and follow-up for the protection of the school group against communicable disease, and he should provide and supervise a plan whereby the health of teachers may be safeguarded and the school may be protected against the presence of teachers with communicable diseases; he should cultivate the cooperation with the schools of all agencies in the community including groups and individuals who have a legitimate interest in the health of children.

Reference: *"School Health Policies"* by W. W. Bauer, M. D.

To Our Parents

The child is sent to school to prepare for life. The whole scheme of education is predicated on the assumption that the child will live and should be prepared for useful citizenship. The Board of Education, the Board of Health and the medical profession feel that this investment should be protected, and with this in view we are calling the matter to your attention by devoting this issue of HEALTH NOTES to the school child and his parents.

Most of the repeaters in school are children suffering from physical or mental handicaps. This is added expense to the parent and to the government, as well as precious time and suffering to the child. It costs the State of Florida \$48 for a child to repeat a grade. It costs parents a year's board and lodging, and the child one year of future earning capacity.

We urge you to give your child a fair chance:

1. Have your doctor examine your child and make sure he or she enters the new school year without a handicap.
2. Immunize your child against smallpox, diphtheria, typhoid fever.
3. If the examination reveals defects, have them attended to by competent medical, surgical and dental care.
4. When your child is feeling ill call your doctor before allowing him to go to school or anywhere else that he may possibly expose many other children to some serious, communicable disease.
5. Healthy physique is one of the best defenses against disease, especially infantile paralysis and spinal meningitis. Let your doctor treat colds and other disorders which may lower body resistance and make your child more susceptible to invasion of dangerous germs.—A. B. McCREARY, M. D., Florida State Health Officer.

Groups Confer To Map Health Teaching Plan

General program for Florida schools discussed at meeting of education department, state health department, medical association, lay organizations.

GAINESVILLE was the scene this past month of a joint conference between representatives of the State Department of Public Instruction, the State Board of Health, the Florida Medical Association and other professional and lay organizations interested in public health. Purpose of the meeting, which lasted two weeks, was the adoption of a general plan for teaching health in public schools of the state according to the most modern methods and principles of public health practice.

The conference was called by Colin English, state superintendent of schools, as the outgrowth of a program developed over a period of months by the State Department of Public Instruction and the State Board of Health. Joe Hall, consultant in Health and Physical Education for the state education department, presided.

At the time of going to press the middle of the month, it had been decided by those attending the conference, to approach the subject of a school health program on four fronts, namely—

I—School Environment

1. Physical Environment
2. Hygienic Arrangement of School Day

3. Pupil - Teacher Relationship

II—Health Service

1. Health Examinations as Demonstrations
2. Correction of Defects

III—Health Instruction

1. State problems as basis for curriculum

IV—Adult Education

It was anticipated that there would be considerable expansion of this outline as the conference progressed.

One of the most prominent participants of the conference was Dr. G. F. Amyot, who recently made a six-month study of health problems in Florida for the Committee on State Studies of the American Public Health Association. The study, an impartial survey upon which to build a long-range disease control program, was secured for the state by the State Board of Health and incurred no expenditure on the part of any state department. The summary report of the American Public Health Association field staff's findings went into considerable detail on the best methods of teaching health in the schools. It was for this reason that Dr. Amyot was asked to assist the conference in preparing Florida's new plan for teaching health in public schools.

Other out-of-state persons attending, in addition to Dr. Amyot, were Miss Fannie Shaw, director health education, Georgia State Health Department; Miss Ruth Henderson of Washington, D. C., director Junior Red Cross; Miss Alice Miller, University of Texas, Austin, Texas; Dr. Garland Weidmer, Assistant City Health Officer, Atlanta, Georgia.

Among Floridians attending were Dr. Luther B. Holloway, Jacksonville, chairman child health committee, Florida Medical Association; John P. Ingle, Sr., Jacksonville, chairman State-Wide Public Health Committee; Mrs. J. Ralston Wells, Daytona Beach, president, Florida Federation Women's Clubs; Mrs. Malcolm McClellan, Jacksonville, president Florida Congress Parents and Teachers, and co-chairman State-Wide Public Health Committee; **Mrs. Inez Nelson**, Orlando, president Florida State Nurses Association; M. W. Carothers, Tallahassee, State Department of Public Instruction; Dr. J. C. Dickinson, Tampa; Dr. John A. Moore, and Dr. J. Maxey Dell, Jr., Gainesville, representatives Florida Radiological Society; Mrs. May Pyncheon, Jacksonville, executive secretary Florida Tuberculosis and Health Association; Dr. Lloyd N. Harlow, Jacksonville,

Florida State Dental Society and director dental health, State Board of Health; Miss Grace Fox, and Miss Katherine W. Montgomery, department of physical education, Florida State College for Women; James S. Rickards, executive secretary, Florida Education Association; Lafayette Golaen, secretary Florida High School Athletic Association; Dr. J. F. Pearson, secretary, University of Miami; B. K. Stevens, instructor in physical education, P. K. Yonge School; Mrs. R. C. Williamson, Gainesville, chairman Alachua County Health Council; Mrs. Gordon Ira, Jacksonville, state health chairman Florida Federation of Women's Clubs; Dr. E. Ben Salt, department of physical education, University of Florida; Nash Higgins, president, Health and Physical Education Department, Superintendent of Public Recreation, University of Tampa; Miss Sara Ferguson, chairman Classroom Teachers; and the following representatives of the State Board of Health in addition to Dr. Harlow: Dr. A. B. McCreary, state health officer; Elizabeth H. Bohnenberger, director health education; Dr. Frank V. Chappell, director maternal and child health; Dr. Dan N. Cone, epidemiologist; Miss Ruth E. Mettinger, director public health nursing; George F. Catlett, chief engineer.



School Health Course Should Be Modernized

G. F. AMYOT, M. D., D. P. H.
Field Administrative Associate, A.P.H.A.

Abstract of recommendations for improving health teaching in Florida, as made by field staff of American Public Health Association in state study.

PRACTICAL health teaching, including the development of health habits and attitudes, presenting health information with the why and wherefore, and the stimulation of ideals in health, should be part of every elementary, junior and senior high school, college and university course.

Diverse elements make up the successful health teaching program, namely knowledge of the subject, liking for the subject, psychology and principles of teaching in general, psychology and principles of teaching health in the schools, sympathy, imagination, ingenuity, experience, methods of teaching the subject, suitable material, proper basal texts, competent supervision, sound health programs, and joint cooperation and participation of responsibility by health and educational agencies.

There should be as much insistence on qualifications for health teaching as for the teaching of primary reading or arithmetic. In teacher training schools health should be taught on two levels: student and teacher.

In the past, not only have curricula in many states been poor, impractical and of the old anatomy-psychology type, but the teachers have not been

taught health by those capable of arousing an interest and liking for the subject. Today health teaching methods must be presented by especially qualified teachers and not by physicians, nurses and health officers.

It is recommended:

1) *That Practical Health Courses Be Compulsory In All Schools From Elementary to the University Level, Inclusive.*

2) *That A New Curriculum Be Developed for Elementary Schools and Junior and Senior High Schools, Presenting Modern Methods of Health Teaching.* The preparation of such a curriculum as regards subject matter should be the joint effort of the Department of Public Instruction and the State Department of Health.

3) *That All Teachers—Both New and Those Now Employed In the State—Be Required To Have An Adequate Course In Health Teaching As Part Of Their Qualifications*

4) *That Capable Teachers Be Appointed By Teachers Training Schools and Colleges To Instruct Teachers In Health Teaching Methods.* If teachers with adequate qualifications are not available, likely candidates should be chosen and sent to schools of higher learning for specialized courses in health teaching.

5) *That Competent Supervisory Service Be Provided For Health Teaching In Elementary Schools.* The school is part of the community. Health conditions of the homes and community as a whole are reflected in health of the school children. Therefore, there must be developed a suitable full-time local health service to protect the homes and the community if the schools and the school children are to be protected. Health services designed only for schools spend too much time and energy on the physical defects which could have been prevented by the application of public health activities in the home and community. A full-time trained health officer can assist in organizing school health services and take active part in the physical examinations of school children, performed to demonstrate their value, with the ultimate object of developing an interest in and a desire for annual examinations by a capable family physician.

The teacher should play a definite part in the school health program and should be trained and encouraged to undertake health services, such as rendering first aid, teaching first aid, testing eyesight and hearing, and the observation of children for signs of communicable disease and other conditions affecting health. The public health nurse is not a certified teacher and should not be expected to teach in the schools. She is the important link between the school, the home and the community. It is a waste of taxpayers' money and an imposition on

an already overcrowded health service to require public health nurses to remain in the schools waiting to give first aid. It may be necessary for public health nurses to instruct teachers in first aid who in turn should teach this as a subject to the pupils, utilizing the opportunities of rendering first aid as a demonstration. To conduct independent school health nursing service is not in conformity with modern public health thought and principles.

6) *That All School Health Service Be Made Part Of The Full-Time Local Health Service.* The program of the local health department must be so balanced as to provide the needed service to the entire community and not to a particular group. When schools receive more than their share of the service they do not get desired results in their own institutions and definitely hinder the progress of public health in the community as a whole.

7) *That Where Full-Time Local Health Service Is Not Now Established, The Endeavor Of The Educational Authorities Be Concentrated, In Cooperation With Health Authorities, On The Establishment Of Full-Time Local Health Units.* Full-time local health personnel should have the authority to supervise the environmental sanitation of the school. The educational authorities should insist that suggestions and recommendations be enforced respecting the school and the health of the child.



United States Has One of Highest Decay Rates

R. P. TAYLOR, D. D. S.

President, Florida State Dental Society, Jacksonville

Sweets, soft food diet seen as cause of paradox of high dental decay rate in country where dentistry has made greatest progress and dental programs are numerous.

DENTAL caries, or decayed teeth, are more prevalent than any other ailment except the common cold. At the age of 15 years, 19 out of every 20 persons have or have had decayed teeth. The figure may be even higher among adults, but the survey was limited to school children. The U. S. Public Health Service made this announcement following a survey of a typical town. There is as yet no scientific answer, the federal health service states, to the questions, Why do teeth decay? and, How can one prevent their decay?

This is the dental condition that exists in the United States, a country that rightly boasts of its natural resources and superior industry, where dentistry has made progress nowhere else equaled. In America there are more and better dental schools, dental students and graduates. This is the home of the dental profession. More care is given to dental needs of our children than in any other country in the world. Yet, we have, save one, the highest prevalence of tooth decay.

The reason for poor teeth in America is a lack of a proper diet. Dr. Harold DeWitt Cross, Director of Forsythe Dental Infirmary for Children in Boston, says "investigation shows that 96 per cent of children who come to this country from the southern part of Europe have sound teeth, whereas it is well known that the teeth of 96 per cent of American children are defective."

The diet of the people of southern Europe is hard, dark bread, so hard it makes the jaws ache to eat it; vegetables; fruits; dark macaroni; hard cheese; fish, not much meat; no sweets; no sweet cakes or soft crackers; no candy. Food of this character leaves the mouth clean.

In America our foods are over-refined. Wheat, a grain of which contains 16 elements, appears after milling process a white flour. During the milling more than three-fourths of its mineral salts are removed, including calcium and phosphorus. An almost pure starch remains, with little protein. The same is true of all the grains.

The high consumption of sugar is another large factor in tooth decay. The average American after a meal of our soft, sweet food will find his teeth and the spaces between the teeth filled with glutenous starchy debris, a most desirable habitat for bacteria always found in the mouth.

Our food furnishes little or no exercise for the teeth and the supporting tissues of the teeth, hence circulation of the blood is lacking, the

The mouth is the portal through which all food passes. For health's sake if for no other reason it should be clean.

The mouth is an ideal place for bacterial growth. It is warm and contains quantities of food.

Personal appearance stands for more in these times perhaps than ever before. What chance has a young man to get a position much less hold one,

whose mouth, because of decayed or unclean teeth, is obnoxious. How can a young woman get anywhere without a winning smile and how can she smile at all with faulty, unkept teeth. People look at your teeth—do you? How can a speaker enunciate properly without a full complement of teeth?

Everyone should bear in mind that tooth decay begins on outside surfaces and that all defects in the enamel

How To Brush Teeth

THE teeth should be brushed three times daily, first, and most important, at night before retiring, after breakfast, and after lunch. The brush should be of two rows of bristles tufted, the tufts spaced so that the bristle ends of each tuft stand out separately. The brush should be used, preferably, dry with a small amount of tooth paste.

Each tooth should be brushed. Each tooth has five surfaces, each of which should be brushed. Three minutes by the watch should be given to brushing teeth before going to bed.

After brushing the teeth rinse the mouth thoroughly, forcing the liquid back and forth for a minute between the teeth. For rinsing use salt solution made as follows: $\frac{1}{4}$ teaspoon ordinary table salt, $\frac{1}{8}$ teaspoon ordinary baking soda to $\frac{1}{2}$ glass water.

After using brush shake out excess water, dip in dry salt, and place in sun to dry. This will sterilize and stiffen the bristles. One should have two brushes to be used alternately. Do not use a tooth brush after the bristles have lost their elasticity. Spend the money you would like to spend on mouth washes for new tooth brushes.

gums become soft, spongy and bleed at the slightest touch. To help nature to combat this condition, exercise must be supplied and debris removed from teeth and gums. This is best done by the vigorous use of the proper tooth brush.

of the tooth should be corrected to protect the vital supporting tissues of the tooth; that a decayed tooth never recovers or heals of itself; that tooth decay ignored until the tooth aches spells death to the tooth and becomes a potential menace to health.

Most Visual Defects Can Be Corrected

SHALER RICHARDSON, M. D.

Jacksonville

Every school child should be given simple visual tests and eye examination, followed by corrective treatment if defects are not to become progressively worse.

A VAILABLE statistics reveal that countless children enter school each year greatly handicapped by defective vision. Most of the visual defects are correctable. Millions of school children are retarded in their studies by defective eyes and this condition is in many instances being disregarded by educational authorities.

Simple visual acuity tests in given areas reveal that twenty-five per cent of school children in public schools have defects of vision and symptoms of eye strain. Many of these defects become progressively worse if not corrected. For example, certain types of nearsightedness, if uncorrected, rapidly increase and eventually produce partial or total blindness. Crossed eyes are frequently allowed to go uncared for with loss of vision in the deviating eye being the end result. Astigmatic errors are allowed to go uncorrected with the child becoming a nervous hysterical wreck.

Such visual tests as are made in our schools are frequently a mere matter of routine with no manifest interest in seeing that the child is given the proper attention. Every child of the

school age should be subjected to simple visual tests and eye examination.

The following chart published by the National Society for the Prevention of Blindness is of value to teachers and parents in discovering visual difficulties in young children:

Observable behaviors:

1. Attempts to brush away blur.
2. Blinks continuously when at a task calling for close eye work.
3. Cries frequently.
4. Has frequent fits of temper.
5. Pays no attention to favorite toys when they are across the room from him.



6. Holds the book close to his eyes when examining it.

7. Holds his body tense when looking at distant objects.

8. Appears uninterested when other children are enjoying a circus, parade or watching other distant moving objects.

9. Seems bored during group discussion of some enjoyable things, such as an airplane in flight.

10. Becomes irritable over tasks, even when self-selected.

11. Selects small playthings and keeps his face close to them.

12. Frowns and scowls when fitting parts of a toy together.

13. Rubs his eyes frequently.

14. Screws up his face when looking at nearby objects.

15. Screws up his face when looking at distant objects.

16. Shuts one eye or covers it when looking at nearby objects.

17. Thrusts his head forward in an effort to see distant objects.

18. Tilts his head when looking at nearby or small objects.

19. Does not try to catch a ball thrown to him.

20. Tends to be cross-eyed when he looks at nearby objects.

Observable conditions

- a. Red rims on lids.
- b. Sties.
- c. Swollen eyelids.
- d. Watery eyes.
- e. Crusts on lids among lashes.

Complaints of the Child

- f. Dizziness.
- g. Headaches.
- h. Nausea.

Too often laziness, neglect of work, truancy and school abandonment is due to defective sight or discomfort in using eyes. In most instances correction changes the attitude of what seemed an impossible pupil to a bright and interested one. There are many eye defects other than those correctable by glasses which are to be considered, namely: congenital anomalies, diseases of the lids, tear duct disease, choroiditis, optic nerve atrophy, corneal disease, etc.

Properly trained nurses under medical supervision can by routine examination determine which pupils need more complete eye examinations, and the parents of these children should be so advised and a follow-up record made. In the case of indigency arrangement should be made for free medical care.

Examination of the eyes should be made at the time the child enters school and annually thereafter. Funds for school examination should be provided by our school taxes. In all instances supervision should be in medical hands.



Endocrine Imbalance Blamed for Defects

N. L. SPENGLER, M. D.

Pediatrician, Tampa

Florida physician believes 60 per cent of children's problems are due to disturbance of endocrine glands—hence endocrinology is responsibility of pediatrician.

IT is an accepted fact that the hormones from endocrine glands, the heat regulating mechanism of the body, are the controlling factor in all human activities, both physical and mental. Various forms of misfits caused from endocrine imbalance result in all kinds of behavior problems, which are evident at all ages from infancy to death.

It has recently been proved that 20 per cent of all pupils in schools for backward, deficient and problem children can be corrected by studying them from an endocrine viewpoint and correcting their imbalance by endocrine therapy. The medical profession today is being overwhelmed by masses of literature on this subject and there are so many conflicting ideas that a beginner is lost in a maze.

It has been my good fortune to grow up with this subject because I have been interested in it for 25 years and have always had confidence in its future. We are today only on the brink of this field of therapeutics and in just a few years it will replace many of the methods of care of the human body now in use.

The functional endocrine disturbances can be treated successfully in adult life but they can also be prevented in early life. It is in infancy, childhood and youth that the most good can be done. This makes the field of endocrinology the responsibility of the pediatrician.

Mentality is materially effected in endocrine imbalance. This may consist of a mental sluggishness just sufficient to cause doubling or overlapping in school grades. It may cause delinquency brought about by a lack of mental courage to face what the pupil regards as inevitable failure. In some countries, delinquency has been almost entirely abolished by treating these children with endocrine therapy.

All of the body functions are under the direct supervision and control of the hormone output of the endocrines. Many functional diseases have as their basis hormonal imbalance. Many of the functional disorders of the menstrual cycle formerly treated by various medicinal and mechanical methods are now successfully treated by hormone therapy, and they are lasting and prompt in their relief.

From an endocrine viewpoint I have studied many groups of sick and indigent people and have seen them almost completely transformed in health, intelligence and a sense of interest in their own affairs. If 20 per cent of children in institutions for delinquency and low mentality groups are found to be endocrine cases, the same must be true in groups not classified as delinquents.

There is a normal body-build factor for every child at every age, the same as there is a chart for age, weight and height. The endocrine chart embraces these three items plus span, upper and lower extremities, circumference of the head, chest, abdomen and hips. The hair, nails, skin, mentality, activity, hyper or hypo activity endurance and many other minor details all

help to establish an endocrine imbalance. Without these facts, the diagnosis is guess work and assumes a hit or miss performance.

Our greatest task today is educating the public to recognize the group of symptoms that are endocrine. This will be no easy matter but time, patience and perseverance always succeed. The success will be evolutionary, not revolutionary because this is the way it should be accomplished. The place to begin is in the home, the schools and in our daily contact with patients. I am sure that when the public is made aware of the fact that 60 per cent of the problems in children are endocrine disturbances, they will waste no time in demanding that these conditions be corrected.

● THE ENDOCRINE GLANDS form a complex group of organic activities which help maintain body form and behavior and include the pituitary, thyroid, parathyroid and suprarenal glands and the ovaries, testes and pancreas. It has been proved beyond doubt that these glands produce one or more specific effects on the growth, physically and mentally, of an individual. Other glands whose endocrine function is more or less accepted, but whose activities are less accurately known include the liver and the pineal and thymus glands. Still other structures in the body are considered endocrine glands but their functions are more obscure.

Trying to Teach Sick Children Americanism

I. E. SIMMONS, M. D.

Director, Gadsden County Health Unit, Quincy

Full-time county health unit devotes much of its energy to program among indigent school children—activities cover pre-natal, infant, school program.

STANDING as a momentous milestone in the lives of countless millions, there will unfold for the first time to some and to others in repetition, the new school year.

To the alert observer comes the resonant chatter of gleeful children, in new and fancy attire about to begin the new school year. To the scrutinous appraiser, however, there appears a definite division of types. As they near the school house he observes the "rachitic" child, or the one who walks with bowed legs; the "anemic" child or the one whose diet is poor or unbalanced; the "adenoid" type, or the one who breathes with mouth ajar; the "myopic" child, or the one who squints his eyes to see; the "orthopedic" case of the one who limps as he walks.

Now they are seated, these children of types. How much English and Spelling, Civics and History, diet and

health can be taught to these indigent infirm? To children impeded by faulty vision, will the blurred vision of an American flag unfold its full meaning? To children weakened by that blood sucking parasite, the hookworm, will the salute to our flag at attention be a pleasant or laborious task?

Will the study of Civics and History evoke the fullest patriotism in the child fatigued by malnutrition? It is to these indigent unfortunates that Florida's full-time county health units dedicate their services.

The county health unit of today considers its school program of paramount importance, not merely to satisfy its overseers as to its industry and effort, but primarily in answer to the accepted fact that the "health of the child is the power of the nation." In so constructing its possible health policies and activities in cooperation with the medical practitioners, the full-time county health unit proposes to maintain the health of the indigent child it oversees, at an equal pace with the educational expansion of all the children who patronize the school system.

The county health unit of today in its correlation with the progressive school system attempts to reach back—back even to pre-natal, post-natal and the age of the "toddler." Then begins the "synthetic manufacture",

F.P.H.A. MEETING

The Florida Public Health Association will hold its 1939 convention in Jacksonville Thursday, Friday and Saturday, December 7-9.

Committees thus far appointed by President Sam D. Macready to take charge of the meeting are Elizabeth H. Bohnenberger, program chairman; Dr. George N. MacDonnell and Fred Stutz, in charge of invitations to Cuban delegation; C. L. Richardson, Dr. Arthur H. Williamson, and Mrs. May Pyncheon, committee to enlarge membership; Dr. Horatio Parker in charge of local arrangements.

Bureau of Maternal and Child Health

F. V. Chappell, M. D., *Director*

This bureau of the State Board of Health was organized in 1936 through funds from Federal Social Security Act, matched with equal amounts from State appropriation for public health. The activities are confined almost entirely to counties with local health departments since proper supervision and follow-up is absolutely necessary for this work.

During 1938 the 17 counties with local health units held 125 maternal and 46 well-baby clinics, most of them conducted by local practicing physicians who are specialists either in pediatrics or obstetrics or whose practice is devoted largely to one or both of these specialties.

Other accomplishments of the bureau included immunization of 26,716 persons against smallpox and diphtheria; 33,084 school examinations; 54,919 nursing visits; 32,091 dental inspections; 950 adult examinations; 8,713 infants admitted to medical and nursing service; 13,923 pre-school children admitted to medical and nursing service; assisted Maternal Welfare Committee of Florida Medical Association in making survey of maternal deaths during year; assisted Committee on Postgraduate Education of Florida Medical Association financially in postgraduate courses at Daytona Beach, all expenses incident to bringing an obstetrician, pediatrician and gynecologist to the State being paid from Children's Bureau funds.

if you please, of a human organism, molding it, as life's moments pass, into a body capable of receiving and assimilating concepts of culture, religion and citizenship.

From the very outset of life, instruction is given the parent in the care of the indigent infant in the so-called pre-natal and "well-baby-clinic." The synthesis continues then to the realm of the "toddler" in which era lies the period of highest mortality from disease, and during which interval the principles of early protection against smallpox and diphtheria are stressed. Those communities in which full-time units are available no doubt are familiar with the "pre-school clinic" as conducted by the health officer. Physical examinations are made of every indigent child about to enter school for the first time and advice given to the parent concerning defects found. The presence of a parasitic infestation such as hookworms, or chronically inflamed tonsils or faulty vision are certainly no

asset to a child about to enter another school year.

With the passing of the pre-school clinic, comes the beginning of the County Health Unit association with the motley mixture of race, creed, and color which enters the primary school system each year for the first time. From this variable herd must the synthesis continue to fashion, if possible, a mechanism sound in mind and body. How many of these products can we expect at commencement, faultless in physical and mental measure, when a view of the rolls of each grade often reveals a group of second graders covered with the effects of a skin infection we know as the "itch"; or a group of third graders mal-fed rather than underfed with scarcely sufficient strength to sit all day in attentive concentration and study. Are we to dismiss these individuals as normal susceptibles to this or that infection, or are we now ready to admit that lack of constructive health education and preventive medical information has

impeded their physical growth and ultimately their mental success?

The County Health Unit, now existent in 17 of Florida's 67 counties is about to begin its school program. In a few days indigent school children in all 67 counties, of all grades, will stand in line and one by one submit to a complete physical examination by their Health Officer. If defects of teeth, vision, posture or nutrition are found the parent will be notified immediately and urged to have their family physician remedy these defects. In 17 of Florida's 67 counties, periodic talks on vitamins, diet, disease, and nutrition will be given. Literature on the prevention of communicable diseases will be distributed. In these same counties some hygiene classes on the care of the sick will be held by the nursing staff of each health unit, and Parent Teacher's Associations will learn of child psychology and habit formation. In 17 of Florida's 67 counties, hookworm specimens will be

taken of all school children and sanitary discrepancies of school and home corrected wherever possible.

In this fashion then will the bodies and minds of the infirm be strengthened. In this, the County Health Unit way, will the principles for which the school system stands be more ready of inprint on the minds and bodies of children kept healthy by preventive medical advice and attention. With the opening of the school year this September, there appears to be present the realization by educators throughout the land, that maximum scholastic efficiency depends first and foremost upon maximum physical and mental measure; so much so, in fact that school health instruction, The Health Unit way, is fast becoming the rule, rather than the exception; a tribute indeed to progressive educators, intelligent parents and efficient public health administrators.

It Must Be Sanitary

Responsibility of regulating sanitary conditions of buildings, premises assigned by law to health departments, school boards—people must see it is fulfilled

THE school your child attends—is it healthful? Is it safe?

These are questions in which, of course, you are interested. But has that interest caused you to look into the sanitary regulations governing the school?

If not, you have unwittingly shirked an obligation quite as important as the one which prompted the law of compulsory education. It is not enough that you should be passively interested in the sanitary condition of schools, any more than it is enough for you to

be passively interested in seeing that your child gets to school every day. You must have an interest that begets action.

The law places the official responsibility for regulating sanitary conditions of school buildings and premises upon health departments and school boards, but it is also the duty of parents and taxpayers to see that these obligations are fulfilled.

Therefore, parents must familiarize themselves with minimum requirements for sanitation of school buildings. These requirements govern such

items as source of drinking water, sewage disposal, plumbing, ventilation, lighting, cleanliness, janitor service, lunch room sanitation et cetera.

Because polluted water is a carrier of such diseases as typhoid and dysentery, the source of drinking water is of vital importance. Where possible, every school should be connected with a municipal water system.

Where municipal systems are not available, private supplies must be developed. The State Board of Health is always ready to consult with local school boards on this all-important matter. In passing, it should be stated, however, that surface waters, lakes, ponds, streams, springs are never suitable unless treated through a purification plant, cost of which makes it only feasible for municipalities. Underground waters are the only safe source for private supplies and even these must be tapped, piped and maintained in accordance with health sanitation regulations, if they are to be safe for human consumption. For even underground water supplies can become polluted in many ways, most prevalent of which is through "pitcher pumps." However, sanitary engineers can advise ways of guarding against these dangers, and their services are always at the disposal of local authorities requesting it.

In disposing of sewage, the municipal system is, obviously, the most desirable because it is the safest, but of course in a great many instances such a system is not available. In such cases, different methods must be provided for disposing of sewage in a sanitary way. Among the other methods are septic tanks, if properly in-

stalled, and sanitary pit privies. In sanitary disposal of human excreta in rural areas, small towns and slums of cities, is responsible for the alarming amount of hookworm in Florida. This is also a potential source of breeding and transmission of typhoid and dysentery germs.

Modern schools are constructed with the thought of providing adequate ventilation. However, the use the teacher makes of these provisions determines to a great extent their true value. Every room should be equipped with a thermometer by which to check the temperature several times daily. Doors and windows should be opened in such a way as to prevent draughts but increase the supply of fresh air. There are many other ways the teacher can assist in operating the school in a healthful manner.

To insure eye efficiency and eliminate strain, classrooms should have at least 10 foot candles of light. This can easily be measured by borrowing a light meter from the nearest electric light office. Glare and shadows can be avoided by careful planning of the school room prior to construction and careful choice and placement of blackboards, desks, pictures, tables and other furniture.

There are many one-room schools where it is impossible to have running water, flush toilets, electric lights or other equipment required of larger schools. Nevertheless, even in these schools there are ways of sanitating them, and at no additional cost. All that is needed is a little thoughtful planning and conscientious execution of the plans by school authorities, health departments and parents.

Preventable Diseases Take Many Young Lives

EDWARD M. L'ENGLE, M. D.

Director Bureau Vital Statistics

Florida State Board of Health

Diphtheria and whooping cough, although both preventable, still cause death among children because parents do not have them immunized—other needless diseases also taking their toll.

IN the calendar year 1933, 25,784 babies were born in Florida. During the calendar year 1939, these babies, if they lived, would be ready to enter public schools for the first time. How many of these children are alive today and of those who died, what was the principal disease or condition causing the deaths?

These questions can be answered approximately and with a fair degree of accuracy. The answer to the first question is that approximately 23,484 of these children will live to their sixth birthday. Of the 2,300 who died, 1,560 died before attaining the age of one year. Of course, in each year since 1933 more children were born and more died. In one typical year during that period, among the causes of death of children under six years of age were the following: 55 died of whooping cough; 41 of diphtheria; 99 of unspecified respiratory diseases; 264 of pneumonia; 199 of diarrhea and dysentery; 549 died as

the result of premature birth; 95 died of injuries at birth; 33 died of unspecified diseases of early infancy; 32 died from automobile accidents; 18 from drowning; 17 from poisoning; 19 of burns and in 144 cases the cause of death was unknown.

Among the causes given above, some are wholly unnecessary as known and proven preventive and curative measures should have been used. In other cases, the mortality could have been greatly reduced by the application on the part of the parents of preventive measures or of that intelligent and loving care which is the birthright of every helpless infant. For instance, no child should be allowed to die of diphtheria and none would if the parents would see that the child is protected by a simple and harmless procedure of proven efficacy. Most of the 199 deaths from diarrhea and dysentery were probably caused by improper food or feed-

ing. Of the 644 deaths from premature birth and injury at birth, many would not have occurred if the mothers had taken the trouble to consult a doctor during the course of their pregnancy. Almost certainly, the 36 deaths from poisoning and burns were

caused because the parents left the means of injury within the reach of small children. Doctors cannot do it all. The parents must show a willingness to assume their responsibility in the protection of their own children.

New School Code

AMONG the sections on school health contained in the new school code passed by the 1939 Florida Legislature are the following which may be of general interest:

CHILD ILL AT SCHOOL.—If a child becomes ill while at school it shall be the duty of the teacher or principal to segregate such child from other children until such time as he can be removed to his home.—Section 633, Article 4, Chapter 6.

PROCEDURE DURING EPIDEMICS.—In case of an epidemic of a communicable disease among the pupils of a school, it shall be the duty of the County Superintendent to observe such measures as are advised by the full-time county health officer who shall act in accordance with rules and regulations prescribed by the State Board of Health. In case there is no full-time county health officer, it shall be the duty of the County Superintendent to act on the advice of a physician designated by the County Board, which physician shall act in accordance with rules and regulations prescribed by the State Board of Health regarding control of communicable diseases.—Section 634.

ADMITTANCE OF CHILD AFTER ILLNESS WITH COMMUNICABLE DISEASE.—A school child who has been ill of a communicable disease shall in no case be allowed to return to school except upon the written permission of the full-time county health officer or other reputable physician licensed to practice in the State of Florida.—Section 635.

PHYSICAL AND MENTAL EXAMINATION.—The State Board of Education and the State Board of Health shall jointly prescribe uniform forms, rules and regulations, and, through their executive officers, shall arrange for the examination at appropriate intervals of each child attending the public schools of the State for the purpose of discovering, reporting, and promoting treatment of mental and physical defects that require medical or surgical treatment for the proper development of each child.—Section 629.

MEDICAL EXAMINATION OF SCHOOL CHILDREN UNDER SUPERVISION OF STATE BOARD OF HEALTH.—Subject to these rules and regulations the State Board of Health shall have supervision over all matters pertaining to the medical examination of school children in Florida, with such duties and powers as are prescribed by law pertaining to public health, and all school children shall be examined as to their physical condition at appropriate intervals. Any work done by health authorities in schools shall be arranged with the school authorities.—Section 630.

NEW BOOKS

Available From the

STATE BOARD OF HEALTH LIBRARY

HEALTH UNDER THE "EL"

by C.-E. A. Winslow and Savel Zimand. N. Y., Harper, 1937, price \$2.25. 198 pp.

That "it can be done" is clearly set forth in Dr. Winslow's account of the Bellevue-Yorkville Health Demonstration in Mid-Town New York. The clinic for pre-school children, the syphilis campaign, the plea for periodic health examinations—are but a few of the many public health activities brought into action in this mid-town district of New York where so few people knew the importance of health.

Facts and figures give one side of the picture says New York's Mayor LaGuardia in the introduction. Another side—the human side—is suggested in this story of neighborhood health promotion in New York City whose program might well be applied to any community in the United States.—K. B. K.

NATURAL HISTORY OF POPU-

LATION, by Raymond Pearl, New York, Oxford University Press, 1939. Price \$3.50. 398 pp.

This study of population from the standpoint of a biologist demonstrates the author's assiduity in the collection of pertinent facts and his careful statistical analysis of a mass of data collected by him and others. One of the interesting conclusions reached by him is that there is no inherent difference in the possible fertility of native born and foreign born white women and women of the colored race, nor between women of different economic status, with the possible exception of women of the lowest economic status, for whom it would appear that there is some evidence of decreased fertility. This is contrary to a rather widely held opinion among those who have not made as careful studies as has the author.

He attributes the declining birth rate mainly to later age at marriage and the lessened fertility of women in the older age groups and the increasing use of contraception. He, however, doubts that sexual practice can be altered by legal edict or that a relative excess of reproduction on the part of underprivileged classes is necessarily ruinous to civilization.—E. L.

RURAL MEDICINE,

Springfield, Ill., Thomas, c1939. 268 pp.

As a result of living and working in a rural environment, the Staff of The Mary Imogene Bassett Hospital organized a Conference on Rural Medicine which was held in Cooperstown last October. The proceedings of this Conference make up the contents of RURAL MEDICINE.

The purpose of this Conference may be briefly stated as follows: (1) To provide a forum for discussion of problems of rural medicine and to give publicity to ideas and suggestions for accelerating progress in rural hygiene. (2) To define and set apart as distinct problems those which have a special relationship to the health of rural communities. (3) To present a picture of rural morbidity. (4) To stimulate unsentimental scientific scrutiny of those conditions which influence the incidence of disease and disability in rural populations; and in spite of widespread mistrust of the intellectual method to promote its application to the problems of rural medicine.

The existing conditions, the needs, the opportunities, the inefficiencies and the failures suggested by the papers read at this Conference constitute a group of interrelated problems and questions which insistently present themselves to those who scrutinize critically rural medical services as they are.—J. V.

BOOKS ON CHILD HEALTH

Available From the
State Board of Health
Library

BABIES ARE HUMAN BEINGS, by C. Anderson Aldrich, M. D. N. Y., Macmillan, 1938.

Called "An interpretation of Growth," this book is primarily concerned with the development of babies, but it has many implications for older children and for young people.



NEW-BORN INFANT, by Emerson L. Stone, M. D. Phila., Lea & Febiger, 1938.

"A manual of obstetrical pediatrics," the present revision of Dr. Stone's books aims to review concisely the accepted principles of physiology and pathology in the new-born infant, to emphasize obstetric and pediatric practices of proven value.



TEACHING PROCEDURES IN HEALTH EDUCATION, by Howard L. Conrad and Joseph F. Meister. Phila., Saunders, 1938.

Designed for those engaged in health teaching, the authors discuss the reason for and necessity of health education; they give a full explanation of the various methods used successfully.



SOCIAL SERVICES AND THE SCHOOLS, by Educational Policies Commission. Wash., the Commission, c1939.

The Education Policies Commission presents in this document a systematic analysis of cooperative relationships between public schools and public health, welfare, and recreation agencies and public libraries.



PRACTICE IN PRE-SCHOOL EDUCATION, by Ruth Updegraff, N. Y., Macmillan, 1938.

A textbook in nursery-school practice employing a new method of presentation, this contribution of Dr. Updegraff's offers solutions in enabling the child to meet the problems of living effectively.



NURSERY YEARS, by Susan Isaacs. N. Y., Vanguard, 1938.

"Explains the typical behavior of young children in the light of their physical, intellectual and emotional development, and offers concrete advice on home management. Unusual for the sound but non-technical interpretation of the emotional life."
—*Child Study Association of America.*



TEACHERS AND BEHAVIOR PROBLEMS, by E. K. Wickman. N. Y., Commonwealth Fund, 1938.

The author presents the essence of his original study of teachers' reactions to behavior and personality difficulties of children.

CONTROLLING NARCOTICS *in* FLORIDA

● An inside picture of narcotic control in Florida will be given in the October issue of **HEALTH NOTES** when the Division of Drug Inspection, Florida State Board of Health, describes their many and colorful duties.

It is this division's responsibility to apprehend forgers of narcotic prescriptions—to commit to hospitals those drug addicts so far advanced that they must be confined—to issue permits to pharmacists for filling drug prescriptions—and to check doctors writing prescriptions to make sure they have a license to practice medicine.

All this gives the division a key position in the control of illegal practice of medicine and pharmacy. Read next month's **HEALTH NOTES**.

FLORIDA STATE LIBRARY

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HEALTH NOTES

DRUG AND NARCOTICS ISSUE

VOL. 31 No. 10

OCTOBER 1939

OFFICIAL PUBLICATION

STATE BOARD OF HEALTH

JACKSONVILLE, FLORIDA

Books On Narcotics

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MARIHUANA: America's New Drug Problem, by Robert P. Walton, Philadelphia, Lippincott, c1938.

PHANTASICA: Narcotic and Stimulating Drugs, Their Use and Abuse by Lewis Lewin, N. Y., Dutton, 1931.

DANGEROUS DRUGS: The World Fight Against Illicit Traffic in Narcotics by Arthur Woods, New Haven, Yale University Press, 1931.

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TRAFFIC IN OPIUM AND OTHER DANGEROUS DRUGS for the year ending December 31, 1938. U. S. Treasury Department, Wash., Govt. Print. Off., 1939.

DOCUMENTATION of fifth annual conference of committees of the World Narcotic Defense Association and International Narcotic Education Association. World Narcotic Defense Association, N. Y., the Ass'n., 1932.

NARCOTIC LAW ENFORCEMENT by Bureau Drug and Narcotics. Florida State Board of Health. Jacksonville, the Board, 1933.

SUPPLEMENTS TO THE U. S. PUBLIC HEALTH REPORTS

CLINICAL STUDIES OF DRUG ADDICTION: I. The Absence of Addiction liability in "perparin", by C. K. Himmlsbach. Wash., Govt. Print. Off. 1937.

STATISTICAL ANALYSIS OF THE CLINICAL RECORDS OF HOSPITALIZED DRUG ADDICTS. By Michael J. Pescor, Wash., Govt. Print. Off., 1938.

STUDIES ON DRUG ADDICTION: With Special Reference to Chemical Structure of Opium Derivatives and Allied Synthetic Substances and Their Physiological Action. By Lyndon F. Small, Wash., Govt. Print. Off., 1938.

CHEMISTRY OF THE OPIUM ALKALOIDS, by L. F. Small and R. E. Lutz, Wash., Govt. Print. Off., 1932.

STATE LAWS relating to the control of Narcotic Drugs and the Treatment of Drug Adiction. Wash., Govt., Print. Off. 1931.

PROBLEM OF DRUG ADDICTION by Thomas Parran. Wash., Govt. Print. Off., 1939. Reprint from the U. S. Public Health Report.

DRUG BUREAU HAS MANY GOALS

Ever mindful of its duty towards upholding higher standards of public health in Florida, the Bureau of Drug and Narcotics, State Board of Health, works steadfastly towards these goals:

Elimination of the practice of pharmacy by other than State Registered Pharmacists.

Elimination of the "quack", namely the person practicing medicine without benefit of either schooling or license.

Elimination of "cancer cure" specialists, house-to-house canvassers of patent and self-discovered sure-cure remedies.

Confinement of prescription of narcotic drugs to graduates of recognized colleges of medicine, duly registered under State law to practice medicine.

Elimination of bootleg traffic in narcotic drugs.

FLORIDA HEALTH NOTES

ESTABLISHED 1890
JACKSONVILLE, FLORIDA

Official Publication State Board of Health

VOLUME 31 ■ NUMBER 10 ■ OCTOBER ■ 1939

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Florida Health Notes, published monthly on the 25th of the month by the Florida State Board of Health. Publication office, Jacksonville, Fla., headquarters of the State Board of Health. The editors are not responsible for unsolicited manuscripts. Copy for publication must reach Jacksonville not later than first day of month preceding date of issue. Entered as second class matter, Oct. 27, 1921, at postoffice, Jacksonville, Fla., Act of Aug. 24, 1912.

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DRUG BUREAU HAS MANY GOALS

Ever mindful of its duty towards upholding higher standards of public health in Florida, the Bureau of Drug and Narcotics, State Board of Health, works steadfastly towards these goals:

Elimination of the practice of pharmacy by other than State Registered Pharmacists.

Elimination of the "quack", namely the person practicing medicine without benefit of either schooling or license.

Elimination of "cancer cure" specialists, house-to-house canvassers of patent and self-discovered sure-cure remedies.

Confinement of prescription of narcotic drugs to graduates of recognized colleges of medicine, duly registered under State law to practice medicine.

Elimination of bootleg traffic in narcotic drugs.

FLORIDA HEALTH NOTES

ESTABLISHED 1890
JACKSONVILLE, FLORIDA

Official Publication State Board of Health

VOLUME 31 ■ NUMBER 10 ■ OCTOBER ■ 1939

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Florida Health Notes, published **monthly** on the 25th of the month by the Florida State Board of Health. Publication office, Jacksonville, Fla., headquarters of the State Board of Health. The editors are not responsible for unsolicited manuscripts. Copy for publication must reach Jacksonville not later than first day of month preceding date of issue. Entered as second class matter, Oct. 27, 1921, at postoffice, Jacksonville, Fla., Act of Aug. 24, 1912.

State Health Officer Drafts New Program



A. B. McCREARY, M.D.

N. A. BALTZELL, M. D.

*President, Florida State Board
of Health*

Dr. McCreary's program based on findings of American Public Health Association's state-wide survey of Florida health conditions and recommendations for improvement. . . . new health officer calls on medical association, people and "all organizations interested in welfare of Florida" for active participation in program.

FLORIDA is exceedingly fortunate in having secured as State Health Officer, so capable a man as Dr. A. B. McCreary who comes to the position with a background of more than 15 years devoted to medicine and public health. He has a record of fearless adherence to the highest ideals of health administration and has been a leader in the movement to have public health administered jointly by the medical profession and the department of health.

Dr. McCreary was appointed August 4 by Governor Fred P. Cone to succeed the late Dr. W. A. McPhaul. For four years prior to his appointment as State Health Officer, Dr. McCreary directed the work of the Bu-

reau of Local Health Service of the Florida State Board of Health. Thus he comes to the highest office of the state health department thoroughly conversant with local problems in every county in Florida.

It is not surprising therefore that Dr. McCreary should choose as the foundation of his administrative policy the establishment of 100% full-time county health units in Florida. Dr. McCreary is well aware that such a program will take time, and that is why he has decided to make this the major objective of his administration.

To substantiate his program Dr. McCreary points to the recent Florida survey by the American Public Health Association. Their report emphasizes

the need for greater strengthening of county health units and abolition of "horse and buggy" health districts which they describe as "ineffectual, inadequate and expensive." The State Board of Health will substitute emergency service from central headquarters to counties without health units until such time as health units are established.

The U. S. Public Health Service concurs in these recommendations and Dr. McCreary's program so thoroughly that they have already assisted in inaugurating steps to carry out some phases of the program. Others will follow, in accordance with the findings of the state-wide survey.

In launching his ambitious program, Dr. McCreary has called for not only the support but the active participation and cooperation of the Florida Medical Association, the State Board of Education, the State-Wide Public Health Committee, Florida Federation of Women's Clubs, Florida Congress of Parents and Teachers, American Legion, State and local Chambers of Commerce, State Welfare Board, Florida Tuberculosis Association and every other organization interested in the welfare of Florida.

In order to familiarize the public with the details of his program, Dr. McCreary is giving widespread distribution to the summary report of the American Public Health Association, "The Health Situation in Florida." Already 5,000 copies have been distributed, and a reprint of 5,000 more is now in progress to meet additional demands.

Dr. McCreary is well known throughout the South in both medical and public health circles. Among the positions he has held during the past 15 years have been epidemiologist, Department of Health, Memphis; assistant in public health, University of Tennessee, Memphis; member of the staff, General Hospital and Saint Joseph's Hospital, Memphis; director bureau of epidemiology, North Caro-

lina State Board of Health; health officer, Northhampton County Virginia, and also of Richmond County, North Carolina; member staff State Hospital, Raleigh, North Carolina. His A.B. degree was gotten at King College, Bristol, Tenn., his M.D. at University of Tennessee, Memphis.

Throughout his career as a public health official Dr. McCreary has fostered the idea of coordinated health programs cooperatively carried on by county medical societies and county health units. He formulated and put into effect what is known as the Medical Participation Program in Northampton County, Virginia, which the County Medical Society describes in a resolution as being responsible for "restoring public health to its rightful position in the minds of the people."

Dr. McCreary is also credited with having instituted a change in measles quarantine which, though unprecedented at the time, is now used by most modern public health departments.

A number of excellent medical and health articles have been written by Dr. McCreary. Recently he enjoyed the singular honor of having one of his papers re-printed in full by the Memphis Medical Journal. It was, "The Final Responsibility of Public Health Rests in the Medical Profession," originally prepared for and read at the 1938 meeting of the Florida Medical Association.

Other papers include "Ten Months of Public Health," "Proposed Immunization Program," "Outline for County Surveys," "Public Health A Public Service," "What Is Public Health?" and "The School Child."

Dr. McCreary is a member of the American Public Health Association and its affiliate the Florida association; the Duval County Medical Society; American Medical Association; Rotary club; Baptist church; Morocco Temple of the Shrine. He is married and has four children.

Pharmacy Contributes Skilled Scientists To Serve Public Health

Pharmacist and physician join hands in cooperation with public health—training requirements for Florida pharmacists outlined—University of Florida only educational institution in state offering course—actual apprenticeship required before graduate eligible to take State Board of Pharmacy examinations.

By WILLIAM J. HUSA, *Ph.C., Ph.D.*

Head, Department of Pharmacy, University of Florida; Chairman, National Conference on Pharmaceutical Research; Past Chairman, Scientific Section, American Pharmaceutical Association.

ANY profession whose services are measured in thousands of years and which is still as important today as it ever was obviously must be of fundamental importance in human welfare. Many present day occupations were unknown a generation ago while the origin of others lies far back in the past. The profession of pharmacy has a recorded history of over four thousand years of service. During this time countless generations or pharmacists have faithfully applied their knowledge and skill in the alleviation of the ills of mankind.

Functionally the pharmacist is a medical specialist, whose particular responsibility is the preparation, standardization and preservation of drugs and the compounding of prescriptions written by the physician or dentist. Cooperation between physicians and pharmacists is a significant factor in public health since the pharmacist is not trained to diagnose ailments and the physician is not fully trained in the methods of preparing and compounding medicines.

Modern society is based on the economic concept of the division of labor. Only one person in a thousand is trained in the profession of pharmacy. Thus the people as a whole have the benefits of the services of the one person in a thousand who has the greatest native ability, skill and knowledge in pharmaceutical science.

In the interest of public health, it is axiomatic that the practice of the health professions must be limited to those who are fully trained and qualified for this important service. In the state of Florida a person who wishes to become a pharmacist must first graduate from a standard four year university course in pharmacy. The only educational institution in Florida which offers this training is the School of Pharmacy of the University of Florida at Gainesville. The four year course of study includes a foundation in general education, followed by intensive courses in pharmacy, pharmacology, pharmacognosy, chemistry and other sciences involved in the practice of pharmacy.

In addition to graduation from a standard school of pharmacy the person wishing to become a pharmacist must secure a year of practical experience in a retail pharmacy under the immediate supervision of a registered pharmacist. The candidate must then show evidence of high moral charac-

ter, after which he is allowed to take the intensive examinations conducted by the Florida State Board of Pharmacy. If the candidate shows the necessary knowledge and skill in the profession of pharmacy, he is then duly licensed by the Florida State Board of Pharmacy.

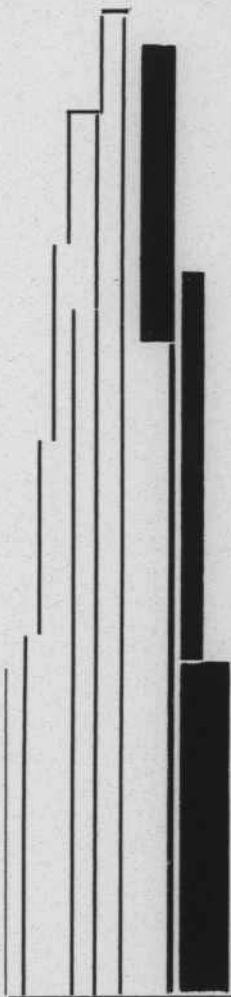
It is thus seen that a pharmacist must pass through an arduous course of preparation before he is licensed to fill prescriptions in Florida. The people of Florida may well be proud of the high standards of pharmacy in the state. Certainly the training of young people for careers in the various professions dealing with the health of the individual and the public is of great importance and significance. Only by insuring a supply of trained and inspired workers in these fields can the welfare of the people be safeguarded.

The citizens of the state of Florida who labored hard and long for the establishment of a school of pharmacy at the University of Florida rendered a great service to the state which is perhaps not sufficiently appreciated by the public as a whole. When the School of Pharmacy of this state was established in 1923, the funds appropriated by the state were augmented by contributions totalling thousands of dollars. This money was given by pharmacists of the state for the purchase of necessary equipment. An increase in the number of pharmacists means more competition and less profit for those pharmacists already established in business. It

is obvious, therefore, that the pharmacists who worked for the establishment of the School of Pharmacy were not actuated by motives of self interest. Rather they were determined that the citizens of Florida should be assured of the safest and best type of pharmaceutical service and that the young men and women of Florida who desired to enter the profession of pharmacy should be able to secure the highest type of training without leaving their native state.

The School of Pharmacy of the University of Florida is now in its seventeenth year of operation. In this time the school has gained an enviable reputation not only in the state of Florida but over the nation as well. In the years that the School of Pharmacy has been in operation many fine young people of Florida have been trained for their life work. Graduates of the school may now be found dotted over the state from Pensacola and Jacksonville to Key West, and they are rendering to their communities an essential service as employes, managers or owners of pharmacies. It gives the writer pleasure to recall that he personally had a part in the instruction of each of these young people.

Drugs, properly used, have been and still are indispensable in intelligent medical practice. In some cases a drug may cure a disease by acting directly on the cause. More frequently it acts to lessen pain, assist in healing and hasten convalescence. As a bridge helps us over the roaring flood waters of a



stream, so a reliable drug can assist nature in carrying us safely through crises in our health.

Perhaps no one appreciates the services of the well trained pharmacist more than does the physician. It was a physician, Dr. Arthur W. Erskine, who said in a public address: "No one appreciates the value of our highly qualified pharmacist more than does the doctor. A great share of the phy-

sician's success is due to the care and precision with which his prescriptions are filled. A highly trained, properly qualified pharmacist is more careful of his stock and prescriptions than others not so highly qualified. The more highly trained the pharmacist is, the better service he can give, since the utmost in pharmaceutical service is needed to make the utmost in medical service possible."

THE PHARMACISTS of Florida take pride in the Bureau of Drug and Narcotics, under the direction of M. H. Doss, and manned by such well known, ethical pharmacists as Frank Castor of Tampa, William L. Johnson of Miami, R. A. George of Lake City and Police Officer R. K. Rand of Jacksonville.

The Bureau, considered in terms of public health, is one of great importance, not so much in the prevention or elimination of preventable diseases as in the protection of health from the standpoint of making certain all compounding of prescriptions is done by registered pharmacists, and the elimination insofar as possible of quacks and healers who prey upon the ignorant populace.

Another most important duty of the bureau is control of illicit narcotics. State police powers are granted the personnel of the bureau, and frequently they assist federal agents in the apprehension of dope peddlers.

Better cooperation with this bureau on the part of physicians, pharmacists and the general public will be to the advantage of all concerned. They can cooperate by immediately reporting persons they suspect of being narcotic peddlers.

There is so much area to cover in Florida that an inspector may be weeks finding out about a suspected case that someone already suspects. So if you will make your reports immediately you will see even better work done by your Bureau of Drug and Narcotics than they are now doing.

A. WM. MORRISON, Ph.G.,
Member of the Board, State Board of Health.

Seized Drugs Always Tested by Laboratory

S. W. WELLS

Chemist

State Board of Health

Unless there is definite proof material seized is a narcotic the drug bureau's case would be thrown out of court. . . . chemist appears as state witness.

WHENEVER an arrest is made by members of the Bureau of Drug and Narcotics of the State Board of Health, material is seized upon suspicion that it is dope. Definite proof must be established that the material is a narcotic, or the pending case will be thrown out of court. This proof is secured by submitting the material to the State Board of Health laboratory.

Sometimes a plea of guilty entered in the preliminary hearing will be sufficient to release the laboratory from the usual routine procedure necessary to confirm the chemical nature of the drug. But otherwise, when a "not guilty" plea is entered, laboratory confirmation is essential for prosecution to be continued.

Confiscated material is carefully sealed in a suitable envelope and labelled as to place, date and time of seizure by the arresting officers. The envelope is then submitted to the chemist for laboratory examination

and report as to the presence of narcotics. Where the material is not actually being subjected to analytical tests in the laboratory prior to its presentation in court as evidence, it is protected against possible theft and tampering by storage in a safe.

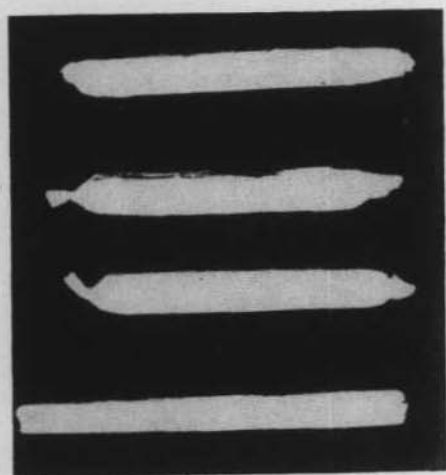
It is the chemist's problem to establish the identity of the material submitted to him although actually only proof that it is a narcotic is all that is necessary to obtain a conviction in court. For instance, when chemical tests reveal that the substance under examination is a opium derivative the investigation need not be carried further, for regardless of what morphine salt it is, the possession of any morphine product is forbidden by State and Federal law except when secured through a physicians' prescription.

Thus the laboratory and its chemists, as both scientists and witnesses, play a part in every narcotic arrest by state officers.

VI

**No. 13794**

Dope addict. What habitual use of
narcotics has done to one woman.



**MARIHUANA
CIGARETTES
(Actual Size)**

Known as
"Reefers" or
"Muggles"

CTIMS of DOPE



No. 13517

Now in an asylum for the criminally insane, this man at the age of 22 confessed slaying five of his family with an ax while they slept. He was reported to be a marihuana user.



No. 3985

Dope peddler and addict, this man is now serving 18 months in Leavenworth, returns to Florida for a 20-year state sentence on charge of armed robbery.

Addicts take dope in many ways and forms but most prevalent method is by hypodermic of morphine, heroin or cocaine injection into arm. Next comes smoking dried, crushed marihuana leaves and flowers in home-made cigarettes, opium in pipes. Less frequent: snuffing powdered cocaine; solution of cocaine dropped into nose; morphine or codeine tablets dissolved under tongue; morphine, cocaine or codeine powders dissolved in water; marihuana resin mixed with sugar as a confection. Latter practice is seldom seen in U.S.A., thus far not at all in Florida.

Control of Marihuana Must be Continual

Marihuana plant, source of dangerous narcotic supply, adapts itself so easily to all climates and conditions that it presents difficult problem to narcotic control officers—Plant matures in three months in Florida.

ABOUT three years ago, anti-narcotic officials were suddenly brought face to face with a new Number One Problem—marihuana, the murderer's drug. There were several reasons for marihuana's slipping to the head of the list without officials being aware of its presence until it was actually there.

The innocent-looking marihuana plant was thought of as a legitimate raw material of manufacturers of hemp rope, bird seed and paint. As a drug it was dismissed as belonging to the Old World, place of its origin.

■

Then, out of the clear, narcotic enforcement officers discovered their "innocent" plant was the chief source of supplying dope peddlers right here in the United States. And, what made the situation the more serious was the fact that the plant was growing in every state in the Union!

For, although a native of the Old World, the marihuana plant is so hardy that it easily adapts itself to any climate, frigid or tropic, dry or moist, mountainous or flat. It flourishes either in a wild state through self-propagation, or is equally prolific when cultivated.

Following the discovery of marihuana's use as a narcotic throughout the United States, many heinous sex-crimes and ax murders were traced to persons who committed these offenses while under its influence. When it also developed that a large majority of its users were boys and girls of high school age, a nationwide drive against this form of dope was launched. It was accompanied by much front-page and magazine publicity designed to teach the public how to identify the marihuana plant. This was a very important phase of the drive, since growers of marihuana always insisted they either didn't know what the plant was or, that it must have sprouted from birdseed that "happened" to be dumped there.

■

Since Federal officers have no police powers, the drive was carried on jointly by federal, state and local authorities. That is the procedure still in effect, and after three years the marihuana situation is under control in most localities, certainly in Florida.

However, because the source of marihuana supply can quickly spring up at your own back door, the drive against this narcotic has settled down into a permanent program of control.

In Florida, such a program is especially important since the temperate climate makes the marihuana plant grow very fast and become extremely prolific. Here seeds which take root in May will be full grown plants in July. And these plants sometimes reach 10 or 12 feet in height.

■

The Bureau of Drug and Narcotics, State Board of Health has apprehended and convicted over 100 peddlers of marihuana. In one instance they broke up a marihuana club that was holding meetings on board a boat at sea, presumably out of reach of police officers. The evidence secured resulted in the arrest of seven peddlers who were supplying marihuana to the members.

Technically, marihuana (or Marijuana) is known as *Cannabis indica* or *Cannabis sativa*. It has many aliases besides the name marihuana. Among them are hemp weed, bhang (the infusion from the plant), ganjah (in tobacco form), majum (as a confection,) charas (the resin extract). And in neighborhood dialect there are a number of slang expressions used to denote marihuana, such as love weed, loco weed, reefers, muggles, mooters, mootas, miggles, Indian hay, grifas, grifos, greefas, joy smoke and Marry Wanner.

As if all these names were not of themselves sufficiently sinister, the frequently used Indian term of hashish is credited with being something of a step-parent to the modern English word, "assasin."

The term marihuana originated in Mexico or South America. In Latin languages the term is applied to substances that produce an intoxication. Mexican laborers are believed to have introduced the habit of smoking marijuana into the United States a few years ago. From the Southwestern area it spread rapidly to every section of the country.

Marihuana can be taken in many forms, but the most common is as a cigaret. Less popular ways are as pellets made from the dried leaves or flowers of the plant, or as a confection made from the resin mixed with sugar.

■

The effect of marihuana upon a user is to paralyze restraint and control, and produce an aphrodisiac effect. Persons intoxicated with marihuana are said to be "high" or "floating." Nothing seems impossible. While in this condition they lose all sense of time, place and even sound. This is followed by a sensation of imaginary suffering and it is then that the marihuana addict becomes possessed with an insatiable desire to kill.

One of the most notorious cases of a marihuana murder on record is the Florida boy who killed his entire family of five with an ax while they slept. Another case is that of a man who walked boldly into the St. Augustine police department and tried to kill several officers.

Thus it can be seen that protection of the public against marihuana must be continued and maintained as a perpetuating service.

Untold Benefits Accrue To Doctors From Work of Bureau of Drug Inspection

M. H. DOSS

*Director, Bureau Drug and Narcotics
Florida State Board of Health*

Work of bureau little known to doctors it serves line of duty includes control of practice of medicine by those not having proper schooling or state license to practice. also apprehend forgers of prescriptions.

BECAUSE the Bureau of Drug and Narcotics, Florida State Board of Health operates almost exclusively as a criminal investigation bureau it is probably one of the least known by the medical profession even though they receive daily benefits from the work of this division. The work is done quietly and its benefits are, therefore, as little known as its work.

In the routine line of duty of apprehending dope peddlers, the drug bureau's officers also devote much time to apprehending and prosecuting quacks and other persons practicing medicine without a license. Being a tourist state, Florida is infested during winter months especially, with unschooled, unregistered, so-called doctors who have neither a medical degree nor a state license to practice medicine. This is one of the most important forms of public protection the State Board of Health can render the people of Florida.

Not many years ago the bureau brought into court a man in Ft. Lauderdale who, posing as a doctor, was operating a heat therapy machine he

claimed would cure arthritis. The division was instrumental in bring a charge of manslaughter against this man because one of his patients was taken from the machine dead and badly burned following what was supposed to be her final cure treatment. The so-called doctor's medical experience consisted of time spent in a hospital as an attendant. The charge of manslaughter was unsuccessful. Prosecution was then started on the basis of the defendant's practicing medicine without a license but the defendant was acquitted.

Although prosecution of such vultures who prey upon the unsuspecting public is sometimes difficult to obtain, the drug bureau believes continual investigation, and bringing of offenders to court will eventually discourage such unscrupulous persons from trying to operate in Florida.

A court case costs the bureau nothing other than general operation of the department. Not so with the defendant. He must furnish bond when arrested, employ attorneys. Therefore the bureau says to the physicians, and

to the people of Florida, "Show us a so-called doctor practicing without a medical license and dispensing or prescribing drugs and, with the co-operation of the prosecuting attorney, we will show you how to get rid of them."

The narcotic law provides that any physician, dentist, veterinary surgeon and others qualified to treat sick and injured human beings and animals may prescribe narcotic drugs in the course of their professional practice only. Since the Bureau of Drug and Narcotics does not presume to attempt to determine who shall and who shall not prescribe narcotic drugs for legitimate purposes, they take the stand that no one is qualified legally to do so except a medical doctor with a license

to practice in the state of Florida, a dentist similarly licensed, and a veterinarian.

Forgers of physicians' prescriptions are also policed and brought to court by the division. Most of such forgeries are committed by dope peddlers or addicts trying to get narcotics. Scarcely a week passes that the division does not apprehend a prescription forger.

Like all forgers, prescription forgers usually keep at it until they are caught. Sometimes they are so clever that as many as 200 prescriptions are forged before it is possible to get enough evidence to bring them to court.

Physician's prescription blanks are secured in various ways. One of the most prevalent methods is for the forger to visit a physician on the pre-

tense of a cold or other simple ailment, get a prescription and during the examination steal the prescription pad. The forger then has a sample of the doctor's signature and all he has to do is fill out the prescription blanks in the amounts of narcotics he thinks the druggist will fill.

It is estimated by the drug inspection bureau that 99 per cent of these persons are apprehended because the druggists is an expert on prescriptions and sooner or later becomes suspicious of the forger either through his actions or the signature. The doctor has no way of knowing about the forgery until the inspector calls upon him with a handful of narcotic prescriptions for him to identify as forgeries.

One of the cleverest forgers the bureau ever apprehended was a man with a cork leg who would enter the drug store with his cork leg on. Immediately upon leaving the store he would have the cork leg carried away by a confederate who would keep it hidden. When the forger was carried to the store by the drug inspection officials to be identified, he would be on crutches with one leg, and in most every case identification was impossible. This man operated all over Florida and South Georgia before he was eventually caught.

There are hundreds of similar, though oftentimes less spectacular cases on record, but all are mute testimony to the daily service rendered the medical profession by the Bureau of Drug and Narcotics.

It is frequently said that a human being cannot absorb more than 8 grains of morphine for legitimate medical use. Records of the Bureau of Drug and Narcotics show that many addicts use as high as 20 grains per day. This leads officers of the bureau to believe the amount of narcotics consumed by addicts is regulated solely by the amount they can get and pay for.

Florida Laws Prohibit Prescription of Narcotics By Naturopaths

Opinions of Attorney Generals Davis and Gibbs, and U. S. District Judge Louie Strum, await rehearing before U. S. Circuit Court of Appeals where case has been taken by attorneys for naturopaths.

NATUROPATHS are prohibited by the terms of Florida statutes from prescribing or administering narcotic drugs.

Because of this ban and, in an effort to gain equality with doctors of medicine in the use of narcotics the naturopaths have for the past ten years been seeking corrective legislation. In addition, they have sought the aid of the courts in an endeavor to have existing laws construed so as to enable them to prescribe and administer narcotics. To date all attempts have failed, though a case is now pending in the U. S. Circuit Court of Appeals.

The earliest construction of the existing laws was rendered in 1931 by Fred H. Davis, the then Attorney General, pursuant to a request from the Collector of Internal Revenue whose duty it is to register those to whom narcotics are issued for medical purposes. In that Opinion Attorney General Davis distinguished between naturopaths and those engaged in regular medical practice, in substance saying "Naturopaths not being medical practitioners are not qualified to prescribe narcotic drugs." On September 8, 1938, Attorney General George Couper Gibbs gave the same interpretation of the law.

Thereafter a writ of Mandamus was applied for in the U. S. District Court to compel the Collector of Internal Revenue to register naturopaths, which writ was denied by the Hon. Louis W. Strum who affirmed the opinions of Attorneys General Gibbs and Davis. An appeal was taken to the U. S. Court of Appeals and to date no decision has been rendered.

The distinction between the professions of naturopathy and materia medica is set forth under Florida law: "Physicians: means a person authorized by law to treat sick and injured human beings in this State and to use, mix or otherwise prepare narcotic drugs in connection with such treatment." (Florida Narcotic Act, Chap. 16087, Acts of 1933, Sec. 1., Sec. 3397 (2) Perm. Supp. to Comp. Gen. Laws).

Naturopathy is defined to mean "the use and practice of psychological, mechanical and material sciences to aid in purifying, cleaning and normalizing human tissues for the preservation or restoration of health according to the fundamental principles of anatomy, physiology and applied psychology, as may be required." (Sec. 3469, C.G.L. Fla. 927 et seq.).

"The Florida Naturopath Act (Sec. 3469 supra) clearly does not regard

naturopaths as medical doctors nor the practice of naturopathy as a practice of medicine," states former Attorney General Fred H. Davis in his decision, which goes on to say that on the contrary the act "authorized licenses thereunder to practice the art of healing only in a limited and defined field called 'naturopathy,' which is defined by Dorland's American Medical Dictionary (16th Ed.) as 'a drugless system of therapy (treatment) by the use of physical forces, such as air, light, water, heat, massage, etc.' To this definition is to be added the use of phyto-therapy, as recognized by the Florida statute, which means treatment by means of

or with the aid of plants or remedies of botanical origin." It is upon this latter permissive provision that naturopaths base their claim to the right to prescribe and dispense narcotics. They assert, according to Attorney General Davis' decision that "phyto-therapy embraces all botanical preparations and their compounds, including morphine, a deriviation opium, which in turn is a product of botanical origin."

Until the U. S. Circuit Court of Appeals reviews the case, the above decisions hold, and the Bureau of Drug and Narcotics of the State Board of Health, must enforce the law as it stands.

FLORIDA NARCOTIC LEGISLATION IS PROGRESSIVE

Florida was the second state in the Union to adopt state narcotic laws in conformity with the Harrison Anti-Narcotic Act, amended, of 1914, and the seventh state in the Union to place enforcement of those laws under the jurisdiction of the state department of health. Today 42 states now have similar laws.

It is necessary to have state narcotic laws in addition to federal narcotic laws because the federal act is a revenue producing law and carries with it no police powers. Therefore, in order to properly control narcotics individual states must enact laws that conform generally to the Harrison act but grant the additional power of police enforcement.

In 1915 the State of Florida passed the Habit Forming Drug Act or Drug and Opium Act. Enforcement of the act was divided between the State Board of Pharmacy and the Bureau of Narcotics. To a certain extent this was overlapping since inspections from both agencies were calling on drug and medical men.

In 1927 the drug inspection bureau of the Board of Pharmacy and the Bureau of Narcotics were combined by an act of legislature. Enforcement of the laws controlling drugs and narcotics were placed under the State Board of Health. It was then that the Division of Drug Inspection was formed. A few weeks ago the division became a bureau and the name was changed to the Bureau of Drug and Narcotics.

The 1915 Habit Forming Drug and Opium Act was repealed in 1933 and the State Uniform Narcotic Drug Act was passed. It is under this act that the Bureau of Drug and Narcotics now operates.

Doctors Can Help Curb Addicts

PRIVATE physicians and pharmacists are in a position to assist materially in the control of drug addiction. They can give aid of inestimable value by furnishing the Bureau of Drug and Narcotics of the State Board of Health with the names of persons whom they know or suspect of being drug addicts by reason of the amount of narcotics sought via prescriptions.

Very often the chronic addict will fool even an experienced medical doctor when he first starts going to him. Knowing that in order to obtain a prescription for narcotics he must feel

pain, the addict will profess excruciating pain.

However, it does not take the physician long to see through the ruse. The difficulty is that by the time he does see through it the addict may start the same procedure with another doctor.

It is in such cases that the physician can be of genuine assistance to enforcement officers. And the pharmacists can be of still greater aid, since it is quite possible that the same pharmacist will fill prescriptions of several doctors for the same addict.



What To Do With Addicts

FLORIDA physicians have the choice of two hospitals when confronted with the problem of placing drug addicts under treatment.

Male addicts are treated at a hospital maintained especially for this purpose at Lexington, Ky., by the U. S. Public Health Service. Both men and women are admitted to the Florida State Hospital at Chattahoochee.

Patients can either enter voluntarily or they can be committed there by the courts if their craving for narcotics has reached such proportions as to have nullified their powers of self-control. Before being committed to the State Hospital, patients are examined by a commission of physicians who decide whether or not the person is a drug addict and, therefore a menace to public health and safety.



Duties Of Drug Bureau

ACCORDING to the laws governing regulation and inspection of drug stores in Florida, the State Board of Health through its Bureau of Drug and Narcotic is charged with:

Registration of all drug stores, enforcement of regulations governing operation of pharmacies and of drug stores in the State of Florida.

Enforcement of laws restricting sale and use of the following narcotic drugs and all their compounds and derivatives:

Cocoa leaves, except derivatives which do not contain substances from which cocaine or ecgonine may be made.

Opium, morphine, codeine, heroine, and cannabis in any form.

There is presented below a table showing fatal cases of drug poisoning for the five years, 1934-1938, from the records of the Bureau of Vital Statistics, State Board of Health, Edward M. L'Engle, M. D., Director.

6

Barbital poisoning	27
Potash poisoning (lye)	21
Kerosene poisoning	14
Mercury Poisoning	11
Overdose of drugs (unknown)	11
Rat and Ant poisoning	10
Strychnine poisoning	10
Arsenic poisoning	9
Lysol poisoning	7
Morphine addiction	5
Thallium poisoning	5
Headache powders	4
Insect Spray	4
Alcohol poisoning	4
Pine oil poisoning	3
Gasoline poisoning	3
Denatured Alcohol	3
Carbolic Acid poisoning	2
Spirits Turpentine poisoning	2
Adrenalin Addiction	1
Overdose Sodium Amytal Chloral and Ipral	1
Luminal poisoning	1
Overdose Asthma tablets	1
Benzine poisoning	1
Cyanide poisoning	1
Alcoholism, acute Sodium Fluo- ride poisoning	1
Drug poisoning (Neurosin)	1
Drank Ink remover	1
Phosphorus poisoning	1
Overdose of Paraldehyde	1
Sulphate Magnesia poisoning	1
Poisoned from tea made of plants and weeds	1
Overdose of Chloral hydrate	1
Zinc poisoning	1
Alkali poisoning	1
Swallowed diuretic pills	1

• • •

You are Invited
to
Attend the
Florida Public Health Association
11th Annual Convention
1939

Jacksonville - December seven thru nine

Meeting open to all persons interested in betterment of
Florida's health conditions.

See tentative program in November Health Notes

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Vol. 31 No. 11

NOVEMBER 1939

OFFICIAL PUBLICATION

STATE BOARD OF HEALTH

JACKSONVILLE, FLORIDA

MALARIA AN ECONOMIC PROBLEM

Health Districts Discontinued

THE five health districts that have been maintained in Florida for 50 of the 67 counties without full-time county health units are a thing of the past. On October 1 they were relegated to the history pages from whence they sprang. These districts were abolished because they were found to be not only archaic but "mediocre, ineffective and extravagant."

Hereafter, the emergency service district offices rendered from their headquarters at Bartow, West Palm Beach, Ocala, Jacksonville and Marianna will be administered from the State Board of Health's central office. Personnel employed in these offices have been assigned to various bureaus of the state department.

Abolition of the health districts was recommended by the American Public Health Association in their recent state-wide survey of Florida public health conditions. Considerable space is devoted to this subject on pages 21, 22, 38, 39 and 40 of "The Health Situation in Florida", summary report of the survey which is being widely distributed.

Concurring in the recommendation, the U. S. Public Health Service has refused to permit further use of federal allocations for operation of district service. In stating its reason for disapproving the health districts, the report says "Obviously the usual district staff of one health officer, two supervising nurses, a sanitarian and one clerk cannot possibly operate a satisfactory health service for 300,000 persons, which was the average population in each health district."

No state health department lists among its duties the performance of local health service, yet that is what these district offices were attempting to do. Local health service is the duty of local governments. The state health department enters the picture only to help organize and, to some extent, help maintain and supervise the local department.

Not only has the district service been expensive and of doubtful value, but it has been detrimental to the establishment of full-time county health units because in many areas people did not realize the difference between full-time service and part-time make-shifts. Therefore, they were unable to estimate the value of full-time service and were satisfied with a mediocre service which they looked upon as good public health when it was not.

The money saved from these districts will be devoted to establishment of full-time county health units.

A. B. McCREARY, M. D.
State Health Officer

FLORIDA HEALTH NOTES

ESTABLISHED 1890
JACKSONVILLE, FLORIDA

Official Publication State Board of Health

VOLUME 31 NUMBER 11 NOVEMBER 1939

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Florida Health Notes, published **monthly** on the 25th of the month by the Florida State Board of Health. Publication office, Jacksonville, Fla., headquarters of the State Board of Health. The editors are not responsible for unsolicited manuscripts. Copy for publication must reach Jacksonville not later than first day of month preceding date of issue. Entered as second class matter, Oct. 27, 1921, at postoffice, Jacksonville, Fla., Act of Aug. 24, 1912.

High Cost Of Malaria Bankrupts Many Areas

DAN N. CONE, M. D.

Epidemiologist

STATE BOARD OF HEALTH

Malaria, or "chills and fever," as it is sometimes called, causes much poverty and unproductiveness in addition to death. . . . although preventable, it remains a major health problem in this state.

USUALLY a commodity which has a "high" cost has high intrinsic value as well. It is something people wish to possess. But in disease, war, fire and crime this is not so. Here the commodity, if it may be called such, is forced upon us and the "high cost" along with it. Unless something is done to eliminate the disease, the community will eventually be ruined, if not completely obliterated. For disease, like fire, war and crime gathers momentum if left unchecked.

Such are the far-reaching economic results of disease, which are entirely apart from individual suffering and personal loss. Diseases that bring calamity to the community are called economic diseases. Usually, economic diseases gain a foothold in certain area because conditions exist that favor its development and continuance.

One of the most costly economic diseases is malaria. There is probably no infection, with the exception of tuberculosis, which can compare with malaria in its capacity to kill, to disable and to reduce to ashes the productivity of a community.

Anyone will agree that \$100,000,000 is quite a sum of money. It assumes even larger proportions when we realize it represents the amount being thrown away each year through economic

A demonstration of accepted methods of malaria control is being carried on in Escambia County by John E. Elemdorf, Jr., M. D., malariologist, under the joint sponsorship of the county, the State Board of Health and the Rockefeller Foundation. Notable progress has been made and the project is now being utilized as training headquarters for public health doctors and engineers from other areas in the state interested in eradicating malaria.

When disease enters a community, that community becomes unproductive. Taxes remain unpaid because there are fewer businesses to tax and people who own taxable homes are paying sickness bills instead of taxes. Commerce and travel diminishes. The community gradually dies or reverts to a level where mere existence is the only possibility and that for just a few.

losses sustained as a result of malaria. This disease is one of the major health problems in from 15 to 20 states and Florida is near the top of the list of those in which it is the most serious.

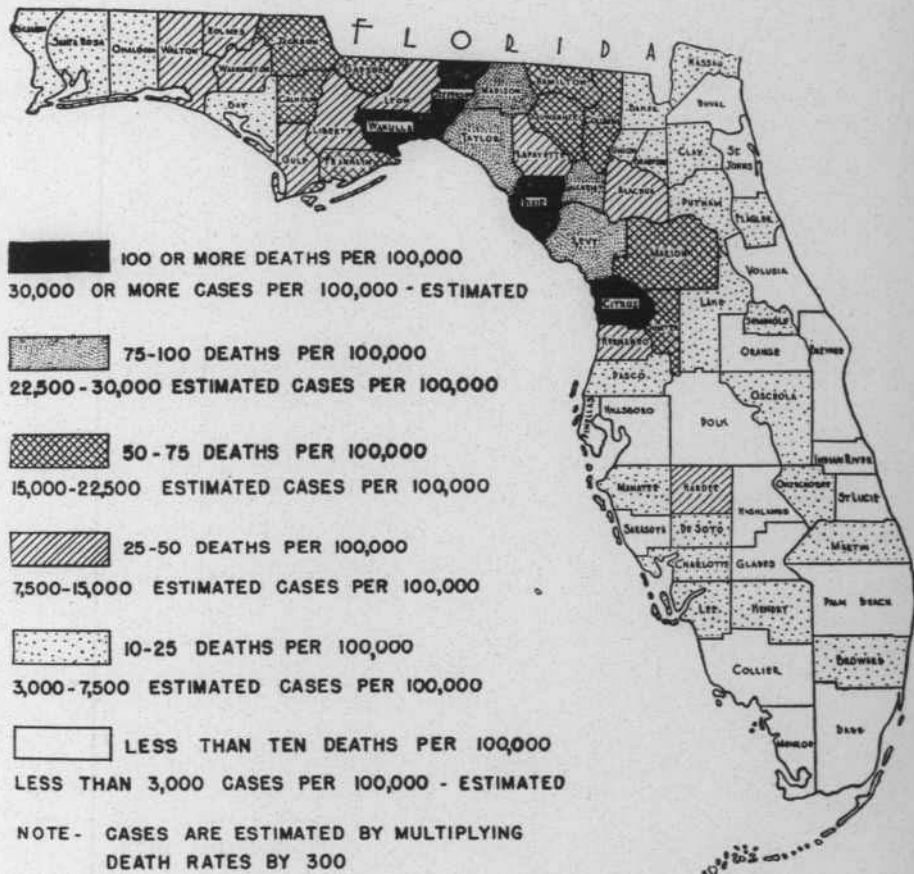
No less an authority than Sedgwick estimates that in the United States every year there are 6,000,000 cases of malaria, a staggering amount. The presence of malaria is estimated to

AVERAGE REPORTED MALARIA DEATH RATES BY COUNTIES

(1928-1937 INCLUSIVE)

PREPARED BY

BUREAU OF EPIDEMIOLOGY
FLORIDA STATE BOARD OF HEALTH



have reduced the industrial output of the South one-third, according to a report prepared in 1938 for President Roosevelt on the Economic Conditions in the South as found by the National Emergency Council.

In Florida alone, by ultra conservative estimate, there are at least 102,000 cases of malaria. There are four

counties with a malaria death rate of over 100 per 100,000 population, an exceptionally high rate. And in 16 counties the malaria death rate exceeds 50 per 100,000 population. A five-year average shows there are annually 340 deaths from malaria in the State. These estimates are based on statistics prepared by the Florida State Board

of Health and, as stated before, are admittedly well on the conservative side.

It is difficult, by stating sums of money and quoting statistics, to estimate the actual value of human life as it applies to a community. The true conception of this value is made much more simple by following another method, that of choosing a smaller entity than a State, County or Community by which to evaluate the ramifications of disease costs, especially malaria.

Probably the most appropriate smaller entity to consider would be a family. And, in order to make the relationship between work and products clearer, the family should be a farmer's family. The head of the family can represent the head of the State, the members of the family the citizens of the State.

At the outset the family is able to work and is, therefore, productive. Money accumulated during the year over and above expenses, has left some surplus for each individual. Under these conditions, enjoyed over a period of several years, all has gone well and the family has prospered.

One early spring, rains fell incessantly on the farm and the weather became hot. Mosquitoes swarmed around the house, stables, out buildings. Life was far from pleasant. One after another members of the family became sick and their duties had to be assumed by other members in addition to their already heavy schedule of work. So it continued until there was no one left to harvest

the crops or attend to the routine duties of the farm. The farm was ruined. The family had no money. The net result was a family with no funds for even bare necessities.

States or communities are exactly the same as that family. They are supported by citizens who pay taxes. But in the final analysis it is the work these citizens do that make payment of taxes possible.

If the population of a community is sick, work is impossible, as was the case on the farm, and payments on taxes cannot be made, nor merchandise purchases indulged in. When 40% of a community or state is sick, it is comparable to two members of our farm family of five being sick and disabled. Therefore, when you speak of the economic effects of disease and refer to a disease as an economic disease, this is the picture that should be kept in mind.

The property of a state, as of the farmer, depends upon the ability of its citizens to work and produce. Disease, especially an economic disease, curtails production materially and, if permitted to continue unchecked, eventually destroys production entirely and bankruptcy sets in.

When disease reaches the tremendous proportions that malaria has it passes beyond the scope of an individual problem and becomes of extreme importance to the community where it is occurring. If communities are in any doubt as to the seriousness of their "chills and fever" problem, a popular name frequently given malaria by laymen, let them look into the books of any large company or business operating in that community.

A glance at the payroll will show the number of people against whose name is written the terse comment, "sick - chills and fever". This means absence from work, loss of wages, lowered efficiency and therefore lower wages when they are able to work. These symptoms are all characteristic of malaria. It does not kill so many during its first attack, but it wears them down and eventually counts them out.

●

Because malaria is a slow killer, people are prone to belittle its seriousness. But public health workers know better. They see beyond the individual and the present. They know many communities where 25 to 60 per cent of the inhabitants are suffering from malaria, and they see the inevitable result: poverty and decadence, not to mention suffering, unhappiness and death.

What makes the picture so odious to the public health worker is the knowledge that it is unnecessary because malaria is definitely a preventable disease. But it is not preventable through the use of patent medicines, or any medicine for that matter which is used as the sole preventive. Malaria is a disease which must be attacked not only by the physician but also by the public health engineer

Malaria is carried from one person to another by a certain kind of mosquito that breeds in water. These breeding places must be either drained or filled, and by an engineer trained for this highly specialized type

of work. But it must be done in conjunction with a public health doctor who knows how to check the progress that is being made through these control measures.

Malaria cannot be eradicated overnight. It takes money, time and perpetual maintainance. It takes continuous supervision of homes and places of business to make sure they are properly screened at all times. But malaria can be eradicated. Indeed, it has been eradicated in some communities.

The fact that this costly disease can be done away with is what makes it a red splotch on our modern civilization. In the face of knowing exactly how to rid ourselves of malaria we permit it to continue.

●

The modern community maintains fire and police departments to combat loss by the potential dangers of fire and crime. No community would be without either of these because they are convinced it is the most economical way of combatting these two problems.

What is true economically of crime and fire is true of malaria. It is cheaper, far cheaper to pay for the weapons to fight malaria than to allow it to go on eating into the manpower of the community.

The investment that pays the largest dividends to any community located in a malarious area is money spent on fighting this disease.

Tentative Program for F.P.H.A. Meeting Made Public

The tentative program for the Florida Public Health Association 1939 convention in Jacksonville December 7-9 has just been announced by Mrs. Elizabeth Bohnenberger, program chairman. There necessarily will be some changes in the final form but it is anticipated that such changes will only be of a minor nature.

A. M. THURSDAY, DECEMBER 7

9:00 Registration—Roosevelt Hotel, headquarters.

First General Session

- 9:30 Invocation—Rev. Newton Middleton, Rector, St. Johns Episcopal Church, Jacksonville.
 9:35 Welcome for Medical Profession—C. F. Mabry, M. D., President, Duval County Medical Society, Jacksonville.
 9:40 Welcome by Honorable George C. Blume, Mayor, City of Jacksonville.
 10:00 Presidential address—S. D. Macready, President, Florida Public Health Association, West Palm Beach, "Analyzing Public Health".
 10:15 "The Doctor and Public Health"—Leigh F. Robinson, M. D., President, Florida Medical Association, Fort Lauderdale.
 10:35 "The Private Citizen and Public Health"—John P. Ingle, Sr., Chairman, State-Wide Public Health Committee, Jacksonville.
 10:55 "Business and Public Health", Harold Colee, President, Florida State Chamber of Commerce.
 11:15 "Public Health Replies", A. B. McCreary, M. D., Florida State Health Officer, Jacksonville.
 11:35 Discussions
 11:40 Announcements
 11:45 Adjournment

Afternoon Meeting

- 2:00 Engineering Section
 Public Health Nursing Section
 Health Officers Section

FRIDAY, DECEMBER 8

Second General Session "Local Health Service"

- A. M.
 9:30 Dr. A. P. Black, Vice-President, Gainesville, presiding.
 "The School Health Service as a Part of Local Community Health Service"—Colin English, Superintendent, State Department of Education, Tallahassee.
 Robert H. Riley, M. D., Director of Health, Maryland State Board of Health.
 M. V. Ziegler, M. D., Regional Consultant U. S. Public Health Service, Washington, D. C.
 Roy Norton, M. D., Department of Preventive Medicine, North Carolina State Board of Health, Raleigh.

- P. M.
 12:30 Luncheon—Pearl McIver, speaker.

Afternoon Session

- 2:00 "Health Education".
 Dr. C. M. Derryberry, Senior P. H. Statistician, Division of Public Health Methods, Washington, D. C.

A. M. SATURDAY, DECEMBER 9

- 8:45 Directors Meeting

Third General Session

- 9:30 "Yellow Fever".
 George N. MacDonnell, M. D., City Health Officer, Miami, in charge.
 D. F. Ramos, M. D., Director, Servicio de Salubridad de Cuba, Fred H. Stutz.
 10:30 "The Health Situation in Florida".
 J. S. Turberville, M. D., President-elect, Florida Medical Association, Century.
 Carl E. Buck, Dr. P.H., Field Director, Committee on Administrative Practice, American Public Health Association, New York.
 G. F. Amyot, M. D., Administrative Associate, Committee on Administrative Practice, American Public Health Association.
 11:15 Business meeting and election of officers.
 12:00 Adjournment

State - Wide Committee Makes Record Progress

JOHN P. INGLE, SR.

State Chairman

Florida State-Wide Public Health Committee

Only six counties without chairmen appointments membership reaches 1800 mark. State Health Officer orders 10,000 summary American Public Health Association surveys for distribution.

ON October 27 the State-Wide Public Health Committee was six months old. It was April 27 that A. J. (Jack) Cleary held the first district meeting in the state, that of District Number 7 which comprises eight counties on the lower east coast. Since then all districts have held similar meetings and many county committees as well.

Six months is not a very long time in the life of an organization, especially when it is in the process of being established. It is with great pride, therefore, that completion of county chairmen and co-chairmen appointments is announced for 61 counties as of October 10. The total membership now numbers something over 1900, with still many county chairmen yet to complete their committees.

The counties without chairmen appointments at time of going to press were Citrus, Hardee, DeSoto, Highlands, Glades, Collier. Work is being pushed on these counties by supervising nurses of the State Board of Health who have been very graciously loaned to the State-Wide Committee and are

in the field for the sole purpose of completing the organization of the six remaining counties.

The summary report of the American Public Health Association survey was ordered into a second printing by Dr. A. B. McCreary, state health officer, and the total edition now comes to 10,000 copies. Half of this number has already been distributed over the state.

Since the primary function of the committee is to foster recommendations contained in this report, it might be helpful for members to know who, in addition to the State-Wide Committee, has received the report. In this way they can determine whether or not some group who should receive it has been inadvertently overlooked.

To date the following, in addition to all State-Wide Committee members have received surveys: school principals, (including colored) county superintendents and boards of public instruction (1050); Parent-Teachers Associations (358); local women's clubs (352); newspapers, magazines (275); American Legion posts

(262); Florida State College for Women Health Education class (232); all libraries (126); Summer health education class, University of Florida (110); School Health conference, Gainesville (100); Florida Commercial Secretaries' Association (100); State Home Demonstration Department (75); Florida Tuberculosis & Health Association, directors (60); Additional supply to Polk County Public Health Committee (50); additional supply to Alachua County Public Health Committee (35); presidents county medical societies (40); additional copies requested by doctors in Duval and Putnam counties (21); Health and Physical education department, Florida Southern College (25); American Public Health Association (20); P. K. Yonge Laboratory School, Gainesville (12); Miscellaneous requests (65).

So many talks on Florida's health problems have been made throughout the state by various committee chairmen that it is impossible to list them all. To name a few, Dean Matherly, chairman of Alachua County Public Health Committee, before the Jacksonville Civitan Club and now scheduled for the annual regional meeting of PTA's at Tampa November 8; Mrs. J. W. McCollum, Gainesville, co-chairman of Alachua County Public Health Committee, was the guest speaker at the Williston PTA meeting early in October; O. W. King, chairman of District 5, before the Zephyrhills Woman's Club through arrangements made by J. H. Price, chairman Pasco County Public Health Committee; your state chairman and co-chairman before the joint school health conference at Gainesville. Your state chairman before the following: Kiwanis Club, St. Augustine; joint civic meeting sponsoring

health unit, Lake City; same kind of meeting, Fernandina; annual American Public Health Association convention, national lay committee meeting. And your state secretary before Hillsboro County Health Unit Auxiliary meeting at which they voted to affiliate with the State-Wide Public Health Committee.

County Committees reporting outstanding activity recently include Dade, Volusia, Levy, Nassau, Flagler, Brevard, Indian River, Hillsboro, Lee.

A short time ago District 5 received the appointment of a permanent district chairman, namely O. W. King. Mr. King lives in Tampa, headquarters of the district, and is industrial manager for the Gulf Life Insurance Company.

Since the new rosters were mailed out Manatee has joined the ranks. E. C. Rice, attorney, of Bradenton is chairman. His co-chairman is Mrs. W. C. Wiggins, of Manatee, prominent club woman in that region.

When Hillsboro County Health Unit Auxiliary affiliated with the State-Wide Public Health Committee they brought into the organization nearly 250 members. Since most of these live outside Tampa Mrs. J. Reid Ramsey, chairman, expects to strengthen her membership within the city proper at a very early date. Before being known as the health unit auxiliary this group was called the Hillsboro County Health Council.

Throughout the state, the health councils and affiliated local state-wide committees are merging in order to prevent duplication of purpose. The consolidated organization will be known as the County Public Health Committee, an affiliate of the State-Wide Public Health Committee.

MATERNAL MORTALITY

E. M. L'ENGLE, M.D.

Director, Bureau of Vital Statistics

Deaths from Diseases of Pregnancy, Childbirth and Puerperal State, and Rates per 1,000 Live Births, by Color, Florida, 1917-1938

YEARS	TOTAL		WHITE		COLORED	
	Puerperal Deaths	Per 1,000 Births	Puerperal Deaths	Per 1,000 Births	Puerperal Deaths	Per 1,000 Births
1938	234	7.5	116	5.3	118	12.6
1937	196	6.6	107	5.2	89	10.0
1936	216	7.7	118	6.0	98	11.8
1935	238	8.5	140	7.1	98	11.6
1934	219	8.2	127	6.8	92	11.4
1933	285	11.1	154	8.7	131	16.2
1932	262	9.6	149	7.9	113	13.2
1931	267	9.9	142	7.6	125	14.9
1930	267	9.9	155	8.3	112	13.3
1929	255	9.5	144	7.9	111	13.0
1928	280	9.4	175	8.5	105	11.5
1927	352	10.3	202	8.5	150	14.7
1926	357	10.3	214	8.6	143	14.5
1925	330	11.3	186	9.3	144	15.6
1924	284	10.6	138	7.6	146	16.9
1923	287	12.4	164	10.5	123	16.2
1922	235	10.7	128	8.4	107	16.0
1921	230	10.4	119	7.8	111	16.2
1920	181	9.3	97	7.2	84	14.0
1919	183	9.8	96	7.5	87	15.0
1918	174	9.6	89	7.0	85	15.4
1917	207	11.6	125	9.8	82	15.7

Deaths from Diseases of Pregnancy, Childbirth and Puerperal State, and Rates per 1,000 Live Births, by Color, by Counties, Florida, 1938

COUNTIES	TOTAL		WHITE		COLORED	
	Puerperal Deaths	Per 1,000 Births	Puerperal Deaths	Per 1,000 Births	Puerperal Deaths	Per 1,000 Births
State	234	7.5	116	5.3	118	12.6
Alachua	6	7.9	1	2.5	5	14.1
Baker	1	6.7	0	.....	1	25.6
Bay	3	6.3	3	7.4	0	.....
Bradford	2	10.2	1	7.2	1	17.5
Brevard	1	4.5	0	.....	1	11.2
Broward	4	7.2	1	3.7	3	10.6
Calhoun	0	.....	0	.....	0	.....
Charlotte	0	.....	0	.....	0	.....
Citrus	1	9.5	1	13.9	0	.....
Clay	1	11.6	0	.....	1	38.5
Collier	0	.....	0	.....	0	.....
Columbia	5	13.3	3	12.9	2	14.0
Dade	19	5.6	10	3.9	9	11.2
DeSoto	1	5.5	1	6.5	0	.....
Dixie	2	14.5	1	10.4	1	23.8

Deaths from Diseases of Pregnancy, Childbirth and Puerperal State, and Rates per 1,000 Live Births, by Color, by Counties, Fla., 1938—(Cont.)

COUNTIES	TOTAL		WHITE		COLORED	
	Puerperal Deaths	Per 1,000 Births	Puerperal Deaths	Per 1,000 Births	Puerperal Deaths	Per 1,000 Births
Duval	22	6.9	12	5.5	10	9.8
Escambia	13	9.4	8	7.3	5	17.5
Flagler	0	.....	0	.....	0	.....
Franklin	0	.....	0	.....	0	.....
Gadsden						
(Ex.)	8	12.4	3	13.1	5	12.0
State						
Hospital	1	250.0	1	250.0	0	.....
Gilchrist	1	7.9	1	9.4	0	.....
Glades	0	.....	0	.....	0	.....
Gulf	1	7.0	1	10.6	0	.....
Hamilton	1	4.1	0	.....	1	10.8
Hardee	0	.....	0	.....	0	.....
Hendry	1	11.9	0	.....	1	41.7
Hernando	1	8.9	0	.....	1	22.7
Highlands	2	10.3	2	15.2	0	.....
Hillsboro	4	1.4	2	0.9	2	4.1
Holmes	3	8.7	3	9.0	0	.....
Indian River	4	23.4	1	8.8	3	51.7
Jackson	7	8.1	3	5.7	4	11.6
Jefferson	2	7.2	1	15.6	1	4.7
Lafayette	0	.....	0	.....	0	.....
Lake	6	12.2	3	8.7	3	20.4
Lee	4	11.0	4	13.0	0	.....
Leon	10	16.1	2	8.4	8	20.8
Levy	0	.....	0	.....	0	.....
Liberty	0	.....	0	.....	0	.....
Madison	3	7.8	1	5.4	2	9.9
Manatee	2	5.6	1	4.2	1	8.2
Marion	3	5.1	0	.....	3	9.9
Martin	1	14.5	1	29.4	0	.....
Monroe	4	17.9	2	12.4	2	31.7
Nassau	1	5.5	1	10.0	0	.....
Okaloosa	2	6.7	2	7.2	0	.....
Okeechobee	0	.....	0	.....	0	.....
Orange	9	9.5	6	8.2	3	14.0
Osceola	2	13.7	1	8.7	1	32.3
Palm Beach	9	9.2	3	5.0	6	15.9
Pasco	3	12.2	1	4.9	2	51.3
Pinellas	3	3.1	1	1.3	2	8.9
Polk	25	16.3	16	13.0	9	29.3
Putnam	3	8.2	1	4.5	2	13.7
St. Johns	3	9.2	0	.....	3	23.4
St. Lucie	2	9.8	1	8.1	1	12.2
Santa Rosa	2	4.7	2	5.3	0	.....
Sarasota	2	8.3	1	5.7	1	15.6
Seminole	3	8.3	0	.....	3	14.8
Sumter	0	.....	0	.....	0	.....
Suwanee	3	7.2	0	.....	3	21.6
Taylor	2	10.1	1	7.1	1	17.2
Union	1	8.3	1	9.6	0	.....
Volusia	5	7.2	2	4.4	3	12.6
Wakulla	1	9.5	0	.....	1	24.4
Walton	3	11.5	2	8.7	1	30.3
Washington	0	.....	0	.....	0	.....

BUREAU OF VITAL STATISTICS

Infant Mortality—Deaths of Infants Under One Year of Age and Rates per 1,000 Live Births, by Color, by Counties, Florida, 1938

COUNTIES	TOTAL		WHITE		COLORED	
	Deaths Under 1 Year	Rates per 1,000 Births	Deaths Under 1 Year	Rates per 1,000 Births	Deaths Under 1 Year	Rates per 1,000 Births
State	1,804	58.0	1,054	48.4	750	80.3
Alachua	45	59.1	23	56.5	22	62.0
Baker	12	80.5	5	45.5	7	179.5
Bay	34	71.7	28	68.8	6	89.6
Bradford	8	40.8	4	28.8	4	70.2
Brevard	15	67.3	7	52.2	8	89.9
Broward	41	74.0	18	66.2	23	81.6
Calhoun	8	34.2	7	36.6	1	23.3
Charlotte	5	125.0	3	96.8	2	222.2
Citrus	9	85.7	5	69.4	4	121.2
Clay	6	69.8	2	33.3	4	153.8
Collier	5	72.5	2	43.5	3	130.4
Columbia	28	74.7	22	94.8	6	42.0
Dade	183	53.9	113	43.6	70	87.2
DeSoto	13	71.4	10	64.5	3	111.1
Dixie	7	50.7	2	20.8	5	119.0
Duval	184	57.4	105	48.0	79	77.5
Escambia	103	74.8	65	59.5	38	133.3
Flagler	2	40.8	2	117.6	0	—
Franklin	8	66.7	2	22.5	6	193.5
Gadsden						
(Ex.)	49	76.0	19	83.0	30	72.1
State						
Hospital	1	250.0	1	250.0	0	—
Gilchrist	9	71.4	7	66.0	2	100.0
Glades	3	68.2	0	—	3	142.9
Gulf	6	42.0	5	53.2	1	20.4
Hamilton	10	41.5	6	40.5	4	43.0
Hardee	10	49.3	9	48.6	1	55.6
Hendry	7	83.3	2	33.3	5	208.3
Hernando	4	35.7	2	29.4	2	45.5
Highlands	9	46.2	8	60.6	1	15.9
Hillsboro	128	46.0	92	40.0	36	74.5
Holmes	16	46.2	16	47.9	0	—
Indian						
River	11	64.3	5	44.2	6	103.4
Jackson	56	64.4	31	59.2	25	72.5
Jefferson	23	83.3	0	—	23	108.5
Lafayette	7	65.4	6	66.7	1	58.8
Lake	28	57.0	15	43.6	13	88.4
Lee	9	24.7	9	29.2	0	—
Leon	36	57.9	11	46.4	25	64.9
Levy	13	52.0	7	42.2	6	71.4
Liberty	7	100.0	7	134.6	0	—
Madison	25	64.6	11	59.5	14	69.3
Manatee	24	66.7	10	42.0	14	114.8
Marion	35	59.3	13	45.5	22	72.4
Martin	2	29.0	2	58.8	0	—
Monroe	20	89.3	14	87.0	6	95.2
Nassau	8	44.2	4	40.0	4	49.4
Okaloosa	13	43.6	12	43.2	1	50.0
Okeechobee	1	18.9	1	22.2	0	—
Orange	54	57.3	36	49.5	18	83.7
Osceola	10	68.5	6	52.2	4	129.0
Palm Beach	94	95.9	34	56.5	60	158.7
Pasco	7	28.6	6	29.1	1	25.6

BUREAU OF VITAL STATISTICS

Infant Mortality—Deaths of Infants Under One Year of Age and Rates per 1,000 Live Births, by Color, by Counties, Florida, 1938—(Continued)

COUNTIES	TOTAL		WHITE		COLORED	
	Deaths Under 1 Year	Rates per 1,000 Births	Deaths Under 1 Year	Rates per 1,000 Births	Deaths Under 1 Year	Rates per 1,000 Births
Pinellas	31	31.7	21	27.9	10	44.6
Polk	75	48.8	52	42.3	23	74.9
Putnam	15	41.0	8	36.4	7	47.9
St. Johns	22	67.5	13	65.7	9	70.3
St. Lucie	20	97.6	9	73.2	11	134.1
Santa Rosa	20	47.3	17	45.3	3	62.5
Sarasota	19	79.2	13	73.9	6	93.8
Seminole	26	71.6	8	50.0	18	88.7
Sumter	13	55.6	8	53.3	5	59.5
Suwannee	25	60.2	14	50.7	11	79.1
Taylor	14	70.4	8	56.7	6	103.4
Union	13	108.3	13	125.0	0	.....
Volusia	35	50.4	21	46.1	14	58.6
Wakulla	3	28.6	0	.....	3	73.2
Walton	13	49.6	10	43.7	3	90.9
Washington	9	33.2	7	32.7	2	35.1

INFANT MORTALITY

For 22 Year Period

Infant Mortality—Deaths of Infants Under One Year of Age and Rates per 1,000 Live Births, by Color, Florida, 1917-1938

Years	TOTAL		WHITE		COLORED	
	Deaths Under 1 Year	Rates per 1,000 Births	Deaths Under 1 Year	Rates per 1,000 Births	Deaths Under 1 Year	Rates per 1,000 Births
1938	1,804	58.0	1,054	48.4	750	80.3
1937	1,759	59.7	960	46.7	799	89.5
1936	1,664	59	975	49	689	83
1935	1,730	62	986	50	744	88
1934	1,818	68	1,011	54	807	100
1933	1,619	63	878	50	741	92
1932	1,680	61	940	50	740	86
1931	1,737	64	979	52	758	91
1930	1,729	64	928	50	801	95
1929	1,766	66	953	52	813	95
1928	2,000	67	1,123	54	877	96
1927	2,303	68	1,336	56	967	95
1926	2,614	75	1,545	62	1,069	108
1925	2,179	74	1,219	61	960	104
1924	2,182	82	1,259	70	923	107
1923	1,822	78	1,017	65	805	106
1922	1,691	77	997	65	694	104
1921	1,770	80	1,001	66	769	112
1920	1,835	94	1,031	76	804	134
1919	1,659	89	927	72	732	126
1918	1,947	107	1,148	91	799	145
1917	1,897	106	1,087	86	810	155

HEALTH AT P.T.A. MEETINGS

Through the interest and efforts of Mrs. Malcolm McClellan, president of the Florida Congress of Parents and Teachers, and state co-chairman of the Florida State-Wide Public Health Committee, health will have a major place on each of the five fall regional conferences of P.T.A. associations. These will be held as follows: Apalachicola, Nov. 2; Tallahassee, Nov. 3; Mount Dora, Nov. 6; Tampa, Nov. 8; Ft. Lauderdale, Nov. 10.

Those participating in the health conferences and addresses of various programs include Dr. A. B. McCreary, state health officer, at Tallahassee, Mt. Dora and Ft. Lauderdale; John P. Ingle, Sr., chairman State-Wide Public Health Committee, Mt. Dora; Dr. Leigh Robinson, president Florida Medical Association, Ft. Lauderdale; Mrs. May Pynchon, executive secretary Florida Tuberculosis Association, Ft. Lauderdale; Dr. A. J. Logie, director tuberculosis control, and Dr. Frank V. Chappell, director local health service, State Board of Health, at Apalachicola and Tampa; Miss Jean Henderson, public relations, State Board of Health, Mt. Dora.

BOOK LISTS

These books available from the State Board of Health Library

MALARIA EDUCATION: A Guide for Professional and Lay Workers by Elma Rood, Madison College, Tenn., The Rural Press, 1939.

"It has been thoroughly demonstrated that merely presenting facts will not bring desired results. It is decidedly advisable to devise better methods of teaching the importance of malaria elimination, and a book like this will be of inestimable value in bringing about the desired change".—J. A. LePrince, Sanitary Engineer, U. S. Public Health Service.

■

MILITARY PREVENTIVE MEDICINE by George C. Dunham, Carlisle Barracks, Penn., Medical Field Service School, 1938.

The latest edition of an outstanding book on preventive medicine and military hygiene.

■

PSYCHOLOGY OF EARLY GROWTH by Arnold Gesell and Helen Thompson, N. Y., Macmillan, 1938.

Late and authoritative information in the field of genetic psychology.

■

SCHOOL HEALTH PROBLEMS by Laurence B. Chenoweth and Theodore K. Selkirk, N. Y., Crofts, 1938, \$3.00.

A timely and important contribution to this controversial subject.

■

INJURIES OF THE NERVOUS SYSTEM INCLUDING POISONINGS by Otto Marburg and Max Helfand, N. Y., Veritas Press, 1939, \$3.00.

Especially discusses the causes, diagnosis and treatment of brain and spinal cord injuries.

On Convention Program

Below is a partial list of those who will address the annual convention of the Florida Public Health Association in December:

LEIGH F. ROBINSON, M. D.
President, Florida Medical Association

JOHN P. INGLE, SR.
Chairman, State-Wide Public Health Committee

COLIN ENGLISH
State Superintendent Public Education

MARK V. ZEIGLER, M. D.
Regional Consultant, U. S. Public Health Service

DR. C. M. DERRYBERRY
Senior Public Health Statistician, Washington

CARL E. BUCK, D. P. H.
Field Director, American Public Health Association

G. F. AMYOT, M. D.
Administrative Associate, American Public Health Association

HAROLD COLEE
President, State Chamber of Commerce

ROBERT H. RILEY, M. D.
Director of Health, State of Maryland

ROY NORTON, M. D.
North Carolina Board of Health

J. S. TURBERVILLE, M. D.
President-elect, Florida Medical Association

D. F. RAMOS, M. D.
Director, Servicio de Salubridad de Cuba

A. B. McCREARY, M. D.
Florida State Health Officer

Further details concerning the tentative program for the convention will be found in this issue.

FLORIDA

HEALTH

NOTES

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VOL. 31 No. 12

DECEMBER 1939

OFFICIAL PUBLICATION

STATE BOARD OF HEALTH

JACKSONVILLE, FLORIDA

THE NEW TUBERCULOSIS PROGRAM

FLORIDA HEALTH NOTES

ESTABLISHED 1890
JACKSONVILLE, FLORIDA

Official Publication State Board of Health

VOLUME 31 ■ NUMBER 12 ■ DECEMBER ■ 1939

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ENTOMOLOGIST

W. V. King, Ph.D., Orlando U. S. Bureau Entomology

MALARIOLOGIST

John E. Elmendorf, Jr., M. D. Pensacola

Florida Health Notes, published monthly on the 25th of the month by the Florida State Board of Health. Publication office, Jacksonville, Fla., headquarters of the State Board of Health. The editors are not responsible for unsolicited manuscripts. Copy for publication must reach Jacksonville not later than first day of month preceding date of issue. Entered as second class matter, Oct. 27, 1921, at postoffice, Jacksonville, Fla., Act of Aug. 24, 1912.

CONVENTION HOTEL RATES

Roosevelt Hotel, convention headquarters, Adams Street between Main and Laura, Jacksonville. Garage on Monroe Street with entrance into hotel lobby. All rooms with private bath: Single, \$2; Double, double bed \$3; Double, twin beds \$3.50.

Tuberculosis Program In Florida Has Shifted From School Surveys To Adults

M. JAY FLIPSE, M. D.

MIAMI

Chairman, Tuberculosis and Public Health Committee
FLORIDA MEDICAL ASSOCIATION

Private physician has real responsibility in making new five-way control program work . . . prevalence of advanced cases at sanatorium "a challenge to medical profession and public," says Miami doctor.

THE problem of Tuberculosis Control in Florida has been carefully studied during the last few years and its magnitude recognized through surveys made in the public schools in many counties of the State. Most of this preliminary work has been done entirely by or with the cooperation of the Division of Tuberculosis of the State Health Department, utilizing the mobile diagnostic unit.

Tuberculin tests with x-ray examinations of positive reactors has indicated an incidence of tuberculous infection in the high school age group comparable with that found in other states and has pointed to the negro as the more frequently infected. In this the findings are in keeping with the relative mortality experience of the two racial groups in Florida and in other southern states. In these surveys organized medicine and the Florida Tuberculosis Association cooperated with the State Board of Health. No county was studied unless the County Medical So-

ciety in such county extended the invitation to the State Board of Health.

The time has come to shift the method of procedure to the study of adult groups of the indigent or lowest income bracket in the hope of finding the active cases who are responsible for sowing the seeds of this disease. It is logical to presume that the removal of active cases to existing facilities for treatment cannot help but reduce the incidence of exposure for those who have not yet contracted tuberculosis. Three large groups which should be studied are (a) the negro, (b) those "on relief" and (c) the "poorly housed and poorly clothed" especially in our rural communities.

The Committee on Tuberculosis and Public Health of the Florida Medical Association is in hearty accord with the State Board of Health in its present program for tuberculosis control. It is conceded that some uninformed physicians may object. The informed physician will recognize that the sur-

veys do not invade the field of medical practice since only diagnosis and not treatment is of interest to the State Board of Health and the underprivileged groups studied are rarely the recipients of medical services except through charity clinics.

It is not the purpose of the State Board of Health to "muscle in" on communities where the County Medical Society indicates its disapproval. Such counties will be avoided and will lose the benefits of the investigation. Counties surveyed will profit by a reduced incidence of tuberculosis directly proportionate to the number of active cases discovered and isolated, and in proportion to the follow-up studies among contacts.

The physicians of Florida can play their part, first by extending an invitation through their County Medical Society to the State Board of Health to conduct studies on tuberculosis in their County; second, by personal efforts to have all known contacts of tuberculous patients examined periodically for possibility of contagion; third, through educational propaganda to encourage private patients to submit to periodic examination of the lungs and encourage them to have their children tuberculin tested at least once each year, and fourth, to educate the County Authorities as to the needs and necessities of adequate local facilities for the isolation and treatment of the tuberculous.

It is a sad commentary on the indifference of the general public and a challenge to the medical profession when 80 percent of the patients sent to our fine new State Sanatorium are "far advanced" cases. Such patients

only too frequently are beyond the possibility of complete cure and yet as custodial inmates of the institution must occupy a bed for two or three times as long as it might require to cure a patient who had early or only moderately advanced disease. While we do not expect all physicians to be specialists in tuberculosis, it is not too much to ask that chests be x-rayed whenever loss of weight, or chronic fatigue may indicate the possibility of early disease.

If we wait for fever, persistent cough and positive sputum to appear we will only diagnose tuberculosis in the far advanced stage and usually after all the neighbors have recognized the symptoms. It is well to remember that the x-ray, properly used, will recognize pulmonary tuberculosis long before any abnormality can be detected with the stethoscope.

Our State of Florida is progressing rapidly in the provision of facilities for the treatment of tuberculosis. Fifteen years ago there was only a handful of beds for tuberculous patients in the entire state. Now we have nearly 1,000 hospital beds for the tuberculous. In our State Sanatorium all modern methods of surgical treatment are intelligently applied for the cure of this disease. Ambulatory pneumothorax patients can obtain treatment in most of the larger and in many of the smaller cities in Florida.

It is our hope that the physicians of Florida will continue to cooperate with the existing agencies and do their part until tuberculosis has not only been controlled but eradicated from our State.

Increase In Death Rate Good Omen--But Paradox Is Confusing To Laymen

A. J. LOGIE, M. D.

Director, Division of Tuberculosis
STATE BOARD OF HEALTH

Indicates more cases discovered rather than more cases considered hopeful sign by public health officials and tuberculosis specialists, says state director.

IN recent years great strides have been made towards solving the problem of tuberculosis in Florida, despite the fact that the mortality rate from the disease in the last two years has shown an apparent increase. The rise in death rate was anticipated by health authorities and, rather than being a startling revelation, is a hopeful sign. It is considered a relative increase; not an actual one. It is due, not to an increase in the number of individuals developing tuberculosis but to the fact that more of them are being recognized. Morbidity and mortality statistics are only now becoming a true index of the tuberculosis situation in this state. Formerly, little confidence could be placed in such figures, as the majority of cases were either unknown or unrecognized. Frequently, cases dying from the disease were diagnosed inaccurately.

Improved social and economic conditions, better sanitation, increased medical knowledge and anti-tuberculosis programs have had much to do

with our success in controlling tuberculosis. However, progress in this direction has been accelerated by the State Medical Association, the State Sanatorium, the State Tuberculosis Association and the State Board of Health, combining forces in the fight against this relentless foe of mankind. These organizations have agreed upon a plan which eliminates confliction, duplication, and overlapping of individual programs, and which assures greater efficiency. In this manner, a solid "Maginot Line" is presented on all fronts.

The combined attack upon the problem of tuberculosis is concentrated in the county through the county health unit. Institutes held at the State Sanatorium are acquainting the health officer with the more recent concepts of tuberculosis, its nature, control and prevention. He is taught the latest in diagnosis and treatment. This knowledge enables the health officer to direct or participate actively in every tuberculosis activity in his county so

that all efforts may be interrelated and more efficiently organized. His department can act as the clearing house in the selection of cases for admission to the sanatorium. His nursing personnel, in cooperation with local social case-workers can trace the source of infection in each case of tuberculosis reported, and investigate the contacts. They can also, upon notification from the sanatorium, prepare the home for the patient being discharged.

Modern diagnostic facilities have been made available to the county health unit so that diagnostic clinics may be permanently established and pneumothorax centers scheduled for the post-sanatorium care of cases. This would be an economic saving to the county, as there would be no necessity to retain a patient in the sanatorium after he had been placed under pneumothorax control. The health officer, through the cooperation of the county medical society can gain the assistance of local physicians in his tuberculin testing programs, and he may obtain aid from the local members of the State Radiological Society in the form of x-ray studies and expert interpretation of chest films which are an essential part of every anti-tuberculosis program.

Following a recent round-table conference, at which each organization interested in tuberculosis work was represented, an intensive state-wide anti-tuberculosis program was formulated. The principal features of the program are the case-finding procedure and its application to individual counties. Each health officer is adapting the program to meet the special needs

of his particular county. The groups of the population have been selected, depending upon their susceptibility to the disease. They include indigent contacts, indigent suspected cases and apparently healthy groups, such as negroes, transients, and relief families. The selection of the negro group is based upon the death rate which is three and one-half times that of the white. Tuberculosis is a common condition among underprivileged and undernourished peoples. The State Department of Education and the State Department of Welfare are cooperating in this work. The State Tuberculosis Association is giving full support to the program and in conjunction with the county health unit, is launching an intensive publicity campaign to familiarize the public with the nature of the investigation.

Already, the health officers of the following counties have requested that the mobile x-ray unit of the Division of Tuberculosis be made available to them so that they may complete their respective anti-tuberculosis programs:

No.	County	Date Beginning
1.	Hillsborough	October 30, 1939
2.	Taylor	November 13, 1939
3.	Gadsden	November 20, 1939
4.	Leon-Wakulla	November 27, 1939
5.	Jackson	December 11, 1939
6.	Pinellas	January 8, 1940
7.	Lake	January 22, 1940
8.	Orange	January 29, 1940
9.	Monroe	February 19, 1940
10.	Broward	February 26, 1940
11.	Gulf-Franklin	March 11, 1940
12.	Bay	March 18, 1940
13.	Highlands	April 1, 1940
14.	Duval	April 8, 1940

Case-finding programs are also being developed for several of the state

institutions and for the four negro colleges in Florida. The policy of the State Board of Health is to encourage the organization of long-range anti-tuberculosis programs which will function continuously as a routine part

of the general health work of each county health unit. We believe that our program has far-reaching potentialities and that it will eventually bring about a complete eradication of tuberculosis in Florida.

X-RAY'S PLACE IN A PROGRAM

J. C. DICKINSON, M. D.

and

CHARLES M. GRAY, M. D.

TAMPA

Roentgenologists

IN any discussion of the value of x-ray examinations and particularly in tuberculosis work, two fundamental principles must be thoroughly understood before an intelligent study of the question at hand can be undertaken. The first of these concerns the film itself, as nowhere in the field of roentgen diagnosis is it of more importance that films of excellent quality produced by meticulous technique be obtained. This necessity, long realized by the trained roentgenologists who know all too well the inherent pitfalls of poorly exposed films, is far too often disregarded by the man whose x-ray work is supplemental to another phase of medicine. For this reason the x-ray examination must be done in an office equipped to produce films of the highest technical quality.

The second principle concerns the human element in the examination, the man who makes the study. The developmental years of roentgenology are past and it is no longer justifiable for all or any physician to assume the responsibility of an x-ray diagnosis. In no other field of medical science is training and experience of more importance, and in no field of roentgenology is such more necessary than in tuberculosis work. The x-ray studies in tuberculosis should and must be done by a man trained in roentgen interpretation. In other words, the value of x-ray examinations is directly proportional to the quality of the films studied and the qualifications of the examiner.

There is much which can be said concerning the use of x-ray examinations in the diagnosis of tuberculosis. In the first place an x-ray examination is not infallible in such a diagnosis. The belief held by both the laity and many physicians that such an examination is the one irrefutable procedure in the diagnosis of tuberculosis is utterly wrong and no one is more cognizant of this than the trained roentgenologist. A study of x-ray films is a study of shadows and the pathological processes responsible for their production and as tuberculosis is not the sole producer of such shadows in the lungs, and particularly in the apical regions, it is at times utterly impossible for a roentgenologist in all honesty to make an exact diagnosis. It is then that he demands repeated examinations in order that he may study the progress or development of the suspected lesion. X-ray examinations are of great importance in the early diagnosis of tuberculosis. It is true, but they are fallible and particularly so when but a single examination is relied upon. The diagnosis of tuberculosis is not confined to the one specialty but is in reality a problem demanding the best efforts of the internist or general practitioner, the pathologist, and the roentgenologist.

In two fields of tuberculosis work the x-ray examination is of inestimable value, namely, in case-finding and in the serial film study of cases under treatment. When surveys are made of large groups of people, such as school teachers, or when members of a family must be checked because of a tuberculin-positive child, the x-ray examination is the method used because in this way those individuals who have either a readily diagnosed lesion or a suspicious area can be immediately located and appropriate care or further studies instituted. It is through these roentgen surveys that we have begun to control tuberculosis. And it is through the study of serial films that we have been able to study the progress of the disease, to learn the indications for the various therapeutic procedures, to correlate the relationship between a primary and a secondary infection. It is in these two fields of tuberculosis work that the x-ray examination stands supreme in importance.

What, then, is the value of x-ray examinations in tuberculosis work? In the diagnosis of an early lesion it is of value as one but only one of the armamentaria at our disposal and must be correlated with the history and the findings of clinical examinations. In survey and case-finding work, and in studying the course and nature of the disease with serial films such examinations are of inestimable value. But in all these phases of tuberculosis work the final worth of x-ray examinations must be measured in terms of the man who does it.

FLORIDA PUBLIC HEALTH ASSOCIATION

December 7, 8, 9, 1939 :: Headquarters, R

THURSDAY, DECEMBER 7

9:00 Registration

First General Session

DR. A. P. BLACK, Vice President, Gainesville, presiding

- 9:30 Invocation—REV. NEWTON MIDDLETON, Rector, St. Johns Episcopal Church, Jacksonville
- 9:35 Welcome—THE HONORABLE GEORGE C. BLUME, Mayor, City of Jacksonville
- 9:40 Welcome from Medical Profession—CHARLES M. MABRY, M. D., President, Duval County Medical Association
- 9:50 Address—THE HONORABLE FRED P. CONE, Governor of Florida
- 10:00 Address—"Public Health, Past and Present"—DR. A. P. BLACK, Vice President of the Association and Professor of Agricultural Chemistry, University of Florida
- 10:15 "The Doctor and Public Health"—LEIGH F. ROBINSON, M. D., President, Florida Medical Association, Ft. Lauderdale
- 10:35 "The Private Citizen and Public Health"—JOHN P. INGLE, SR., Chairman, State-Wide Public Health Committee, Jacksonville
- 10:55 "Business and Public Health"—HAROLD COLEE, President, Florida State Chamber of Commerce, Jacksonville
- 11:15 "Public Health Replies"—A. B. McCREARY, M. D., Florida State Health Officer, Jacksonville

THURSDAY, DECEMBER 7

Afternoon Meetings

SANITARY ENGINEERING SESSION

FORD THOMPSON, Leon County Sanitary Officer, Tallahassee, presiding

- 2:00 "The Public Health Aspects of the Sale of Shellfish from Unlicensed Sources"—C. L. RICHARDSON, Shellfish Inspector, State Board of Health
Discussion—L. M. FISHER, Senior Sanitary Engineer, U. S. Public Health Service.
- 2:30 "Rural Water Supplies"—DR. A. P. BLACK, Professor of Agricultural Chemistry, University of Florida, Gainesville
Discussion—S. W. WELLS, Chemist, State Board of Health
- 3:00 Symposium on Milk Sanitation—led by DR. HORATIO N. PARKER, Jacksonville City Health Department
Discussion—DR. A. H. WILLIAMSON, State Board of Health; J. M. SCOTT, State Department of Agriculture; C. B. MATTHEWS, Miami City Health Department; PAUL MALONE, Bay County Health Department.

PUBLIC HEALTH NURSING SESSION

RUTH E. METTINGER, R. N., Director of Public Health Nursing, Florida State Board of Health, presiding

- 2:00 "The Nursing Survey"—DR. C. M. DERRYBERRY, Senior Public Health Statistician, Division of Public Health Methods, Washington, D. C.
- 2:30 "The Merit System"—PEARL McIVER, R. N., Senior Public Health Nursing Consultant, U. S. Public Health Service.
- 3:00 "Lay Participation"—RUTH A. HEINTZELMAN, R. N., Regional Public Health Nursing Consultant, U. S. Children's Bureau, Washington, D. C.

HEALTH OFFICERS SESSION

W. H. PICKETT, M. D., Pinellas County Health Officer, presiding

- 2:00 Five minute discussion of "The Local Health Program—Credits and Debits" by the following county and city health officers:

G. N. MacDonell, M. D., City of Miami; N. A. Upchurch, M. D., City of Jacksonville; J. R. McEachern, M. D., City of Tampa; J. W. McMurray, M. D.; K. K. Waering, M. D.; A. L. Stebbins, M. D.; I. E. Simmons, M. D.; J. S. Spoto, M. D.; L. J. Graves, M. D.; J. B. Parramore, M. D.; W. P. Rice, M. D.; C. A. O'Quinn, M. D.; W. H. Ball, M. D.; C. W. Pease, M. D.

THE ELEVENTH ANNUAL MEETING

Roosevelt Hotel :: Jacksonville, Florida

FRIDAY, DECEMBER 8, 1939

Second General Session

Morning

LOCAL HEALTH SERVICE

- A. B. McCREARY, M. D., Florida State Health Officer, presiding
- 9:30 "Balancing the Local Health Program"—FRANK V. CHAPPELL, M. D., Director of Local Health Service, Florida State Board of Health, Jacksonville
- 9:50 "The School Health Service as a Part of Local Community Health Service"—COLIN ENGLISH, Superintendent, State Department of Education, Tallahassee
- 10:10 "The Responsibility of the Health Department in the Promotion of the Dental Health Program"—F. C. CADY, Dental Surgeon, U. S. Public Health Service.
- 10:30 "Program for Sanitarians in the Local Health Departments"—G. F. CATLETT, Chief Engineer, Florida State Board of Health, Jacksonville
- 10:50 "Local Health Service in Maryland"—ROBERT H. RILEY, M. D., Director of Health, Maryland State Board of Health, Baltimore

P. M.

- 12:30 Luncheon—W. E. VAN LANDINGHAM, M. D., West Palm Beach City Health Officer, presiding
- "Evaluation of the Public Health Nursing Program"—PEARL McIVER, Senior Public Health Nursing Consultant, U. S. Public Health Service.

FRIDAY, DECEMBER 8, 1939

Afternoon

Third General Session

GEORGE N. MacDONELL, M. D., City Health Officer, Miami, presiding

PAN-AMERICAN HEALTH PROBLEMS

- 2:30 Participants: D. F. RAMOS, M. D., Director, Servicio de Salubridad de Cuba
DR. ANGEL de la GARZA BRITO, Dean, School of Hygiene, Mexico City
DR. EDUARDO G. MORALES, Commissioner of Health, Puerto Rico
G. L. DUNNAHOO, M. D., U. S. Public Health Service, Quarantine Station, Miami Beach
- DR. PEDRO KOURI, DR. ALBERTO RECIO, DR. GUILLERMO LAGE, DR. DEMETRIO DESPAIGNE.

SECOND SANITARY ENGINEERING SESSION

DR. A. P. BLACK, presiding

- 2:30 "Design and Equipment of Modern Swimming Pools"—J. R. HOY, Sanitary Engineer, Wallace & Tiernan Co., Jacksonville
- 3:00 "Rural and Institutional Sewage Disposal"—H. DUKE PETERS, Sanitary Engineer, City Health Department, Jacksonville
Discussion—L. M. FISHER, Senior Sanitary Engineer, U. S. Public Health Service,
- 3:30 Symposium on Privy Sanitation—led by C. H. ATKINS, Sanitation Consultant, U. S. Public Health Service.
Discussion—F. A. SAFAY, M. E. PENTON, W. D. MONROE, J. B. MILLER, R. C. CARTER, DR. F. V. CHAPPELL
- 8:00 Banquet—JOHN P. INGLE, SR., toastmaster

SATURDAY, DECEMBER 9, 1939

- 8:45 Directors meeting

(Continued on Page 173)

Education Measures Success of Program

MAY PYNCHON

Executive Secretary

FLORIDA TUBERCULOSIS AND HEALTH ASSOCIATION

There are many channels of education besides newspapers. . . . among them, the sanatorium, refresher courses for nurses, institutes for volunteer workers, lectures for teachers.

A COMBINATION of medical science and education, individual and mass, has been the cornerstone upon which the fight against tuberculosis has been built in this country. From the standpoint of the annual number of deaths and financial and social costs, it still maintains its position as the most serious of communicable diseases in Florida.

Tuberculosis last year took a toll of 987 lives in Florida, a total between four and five times as great as all of the recorded deaths from other acute communicable diseases, excepting only influenza and pneumonias. When to this is added the fact that the average duration of a case of tuberculosis is three to four years, and that the cost of hospitalization per patient is approximately \$1,000 per year, some idea may be obtained of the burden of tuberculosis.

As the peak of tuberculosis comes between the ages of 20 and 40, the wage earner is usually involved. In a large proportion of cases, the care of the remainder of the family becomes a responsibility of the community.

Although our fight against tuberculosis is a winning one, it is not yet a complete victory and it should not lead to complacency but rather to a re-valuation of the whole problem of control, along with the developments of more preventive measures and aggressive educational campaigns. Etienne Bernard in "Tuberculosis and Social Medicine", published in Paris this year, states "the high mortality from tuberculosis in France is largely due to lack of information of the public concerning the disease". The death rate from tuberculosis in France in 1934 was 131 per 100,000 as against 57 per 100,000 in the U. S. registration area. Mr. Bernard recommends more intensive educational programs on tuberculosis for the people of France.

Sanatorium treatment is a most effective measure in the prevention of tuberculosis and the education of the public. It teaches the patient how to take proper care of himself and how to protect his family and friends; hastens recovery and prevents the spread of infection. In addition to being an educational institution for

the patient, it serves as a training center for physicians, nurses and public health workers. From it emanates the latest methods of diagnosis and treatment of this age-old disease.

In Florida a cooperative program carried on by state and county health departments, state and local medical associations, state and local tuberculosis associations and other agencies, is attempting to teach the public the facts concerning the nature and problem of tuberculosis and the necessity and value of periodic X-ray examinations of the chests of those who are apparently well and particularly those who have been in contact with the disease.

In this regard, each July since 1936, one month of intensive training has been offered a selected group of Negro physicians at Miami. In 1939 the 18 Negro physicians completing the preliminary training were offered advanced work at the state sanatorium. Statistics now reveal that there is an increase in the number of cases of tuberculosis found by these physicians and that the cases are being diagnosed at an earlier stage.

The success of post graduate work for Negro physicians stimulated the Graduate Short Course Committee of the Florida Medical Association, to offer, with the financial aid of the Florida Tuberculosis and Health Association, lectures on chest diseases for one week.

Tuberculosis institutes have been conducted for interested volunteer workers. Lectures have been provided

for workers on the staffs of welfare agencies—all with the thought that information supplied to key groups will give aid to the general public.

Films on tuberculosis have been shown before many groups—white and colored, professional and lay, male and female, old and young, those on relief and those employed. Speakers have made numerous talks on tuberculosis before many and varied groups in every section of Florida. Posters, pamphlets and similar material have been distributed far and wide, in city and hamlet, on both sides of the railroad tracks, for tuberculosis is no respecter of race, color or class.

Teachers have had training in health education and lectures on tuberculosis have been incorporated in one-day institutes at which attendance was required. Newspaper and magazine editors have contributed much of their best space very generously.

The result of the cooperative educational campaign in Florida is shown by the marked reduction in the tuberculosis death rate over the last 30 years, by more beds for tuberculosis patients, by greater facilities for diagnosis and treatment of the indigent tuberculous case, by an assumption of responsibility by the individual and the community in the tuberculosis program and by the increased sale of Christmas Seals.

Floridians now realize that no home is safe from tuberculosis until all homes are safe.



**BUY
CHRISTMAS
SEALS**

The National, State and Local
Tuberculosis Associations of
the United States

Turning a Statistical Spotlight on the Sanatorium

R. D. THOMPSON, M. D.

ORLANDO

Superintendent and Medical Director
STATE TUBERCULOSIS SANATORIUM

BELIEVING that a statistical picture of the state tuberculosis sanatorium should prove both interesting and enlightening, the following data concerning what the sanatorium has done is being offered.

The sanatorium received its first patient on February 1, 1938. From that date to October 1, 1939, 710 patients were admitted and 393 were discharged, as follows:

Non-tuberculous	40	10%
Healed Tuberculosis	19	5%
Apparently arrested	77	19.6%
Quiescent	11	3%
Improved	64	16.1%
Unimproved	63	16.1%
Died	119	30%

A more detailed picture will be found in the following data which represents a part of the report for the first fiscal year—from June 30, 1938 to July 1, 1939:

Patients in Sanatorium July 1, 1939	291
Patients in Sanatorium June 30, 1938	317
Patients admitted	268
Patients discharged	164
Deaths	78

The diagnosis of the 268 patients admitted was as follows:

Far advanced	183
Moderately advanced	33
Minimal	12
Healed Tuberculosis	1
Observation	39

50 counties sent patients to the Sanatorium.
No admissions from 17 counties.

In those admitted 77 different occupations were represented—the leaders being as follows:

Housewife	62
Laborer	22
Student	19
Clerk	12
Salesman	12

Farmer	11
Housemaid	9
Painter	6
Bookkeeper	5
School teacher	4

The social status shows:

64	Single
156	Married
19	Divorced
19	Widowed
10	Separated

The 164 patients discharged had the following diagnosis:

Non-tuberculous	16
Healed Tuberculosis	13
Apparently arrested	47
Quiescent	9
Improved	33
Unimproved	33
Far advanced—hopeless	7
Observation	1
Improved (Maximum benefit)	1
Transferred to other Sanatorium	1
Transferred to County Unit	2
Left before diagnosis made	1

It is interesting to note that the largest number discharged in any one group was apparently arrested—better than 25%.

During the fiscal year 78 deaths occurred—45 white and 33 colored, and 51 of the deaths occurred before the age of 40, or 66%.

Surgery

12,825 separate procedures were done.
There were:

- 10,409 Pneumothorax treatments
- 1,033 Pneumoperitoneum treatments
- 94 Thoracoplasties
- 46 Phrenic Nerve Blocks
- 14 Extrapleural Pneumothorax
- 1,012 Thoracentesis
- 85 Blood transfusions

with other surgery, such as appendectomies, etc., bringing the total to 12,825.

X-Ray Department

12,421 separate procedures were done, which included:

- 9,854 Fluoroscopic examination of chests
- 309 Chest stereoscopies
- 1,519 Chest—flat plates
- 164 Chest—flat plates—Bucky
- 528 Teeth

In addition there were spines, joints, G. I. series, etc.

Clinical Laboratory

9,023 separate tests and examinations were made. The leaders in this group were as follows:

- 3,074 Sputums
- 1,539 Blood Sedimentations
- 1,477 Separate White and Differential Blood Counts
- 573 Separate Cell Counts and hemoglobin estimations
- 106 Blood groupings

- 979 Urine examinations
- 107 Sputum Concentrates
- 465 Smears

Other Activities of Sanatorium

- 404,307 Meals were served.
- 65,000 Pieces went through the laundry each month
- 21,519 Individuals visited our patients.

48 Talks on Tuberculosis were made by the Staff to County Medical Societies, Dinner Clubs, Women's Clubs, etc., in addition to lecture courses on Tuberculosis, given to the nurses at Orange General Hospital, Florida Sanatorium and Hospital and to the nurses here at the Sanatorium.

Financial Side of the Sanatorium (In Brief)

There were 113,946 patient days.

Average patients per day—312.18

Operating Receipts from:

State	\$204,824.57
Counties	104,830.32
Pay cases	3,696.61
Total payroll for the fiscal year	\$119,846.54

Total assets—grounds, buildings and equipment..... \$832,721.52

This brief report gives a good cross-section of the work that has been done and what some of the accomplishments of the Sanatorium have been.

ELEVENTH ANNUAL MEETING

(Continued from Page 169)

Fourth General Session

DR. A. P. BLACK, presiding

- 9:30 "Is Your Health Education Effective?"—DR. MAYHEW DERRYBERRY, Senior Public Health Statistician, Division of Public Health Methods, Washington, D. C.
- 9:50 "Interpretation of Vital Statistics in Health Education"—DR. HALBERT L. DUNN, Chief Statistician of Vital Statistics, Bureau of the Census, Washington, D. C.
- 10:10 "Teamwork—the Public Health Worker and His Professional Society"—REGINALD M. ATWATER, M. D., Executive Secretary, American Public Health Association, New York

THE HEALTH SITUATION IN FLORIDA

- 10:30 Discussions by
 - J. S. TURBERVILLE, M. D., President-elect, Florida Medical Association, Century, Florida
 - CARL E. BUCK, DR. P. H., Field Director, Committee on Administrative Practice, American Public Health Association, New York
 - G. F. AMYOT, M. D., Administrative Associate, Committee on Administrative Practice, American Public Health Association, New York
- 11:15 Business meeting and election of officers

Decennial Census Begins Early 1940

EDWARD M. L'ENGLE, M.D.

Director, Bureau of Vital Statistics
STATE BOARD OF HEALTH

IT has been customary at this time of the year to urge each registrar to use every effort to obtain any outstanding birth or death certificates so that registration may be as near 100% as possible. This year there is an additional reason why extraordinary efforts to accomplish this end should be made.

The decennial census will be taken beginning April 1, 1940. Census enumerators will be furnished with a special card on which a report of each infant born during the immediately preceding period will be enumerated. These special report cards will then

be forwarded to each state for a check-up in the state office with birth certificates which have been filed. This will furnish an unusual opportunity to determine the degree of completeness of birth registration. Not only will this supply information as to the percentage of completeness in the whole state but in each registration district. I am sure that no registrar wants the report to show incomplete registration in his district. It, therefore, is urgently requested that each registrar make very special effort to see that there are no unreported births in his district.

Deaths From Tuberculosis (All Forms) and Rates per 100,000 Population, by Color 1917 to 1938 Inclusive, Florida.

YEARS	TOTAL			WHITE		COLORED	
	Deaths	Rates	National Average Rate	Deaths	Rates	Deaths	Rates
1938	987	58.1	*	407	33.7	580	118.4
1937	966	57.8	53.6	400	33.7	566	117.2
1936	905	55.1	55.7	387	33.2	518	108.8
1935	903	55.9	55.0	397	34.7	506	107.9
1934	953	60.1	56.6	381	33.9	572	123.9
1933	1,039	66.9	59.5	398	36.1	641	142.1
1932	1,093	71.5	62.8	395	36.5	698	156.2
1931	1,067	70.8	68.1	427	40.1	640	144.8
1930	1,015	68.6	71.5	432	41.3	583	134.0
1929	1,014	70.8	76.0	416	41.3	598	140.6
1928	1,102	79.7	79.3	481	49.7	621	149.5
1927	1,097	82.2	80.9	463	49.8	634	156.4
1926	1,187	92.3	87.3	519	58.3	668	169.0
1925	999	80.8	86.7	426	50.0	573	148.7
1924	1,054	88.7	89.7	457	56.2	597	159.1
1923	1,079	94.7	92.8	490	63.3	589	161.2
1922	1,019	93.5	96.4	440	59.9	579	163.0
1921	951	91.3	98.9	401	57.6	550	159.3
1920	1,016	102.3	114.0	423	64.3	593	176.8
1919	993	103.7	125.6	461	73.4	532	161.6
1918	1,084	115.9	150.0	494	81.2	590	180.4
1917	1,085	118.9	147.1	472	80.3	613	188.7

*Not available

DEATHS FROM TUBERCULOSIS

(Continued)

(All Forms) and Rates per 100,000 Population, by Color and by Counties, Florida, 1938

COUNTIES	TOTAL		WHITE		COLORED	
	Deaths	Rates	Deaths	Rates	Deaths	Rates
State	987	58.1	407	33.7	580	118.4
Alachua	28	74.7	8	38.8	20	118.3
Baker	1	13.0	0	—	1	55.6
Bay	2	10.1	1	6.1	1	29.4
Bradford	1	11.4	1	15.6	0	—
Brevard	8	52.6	1	9.6	7	145.8
Broward	5	20.2	1	6.1	4	47.6
Calhoun	0	—	0	—	0	—
Charlotte	1	26.5	0	—	1	135.3
Citrus	1	17.9	1	25.6	0	—
Clay	2	27.8	1	19.2	1	50.0
Collier	4	66.7	1	31.3	3	107.1
Columbia	18	114.6	4	41.7	14	229.5
Dade	114	55.7	56	34.0	58	145.7
DeSoto	2	23.8	1	14.5	1	6.7
Dixie	2	34.3	2	54.3	0	—
Duval	168	93.2	40	33.0	128	196.9
Escambia	41	70.6	24	55.4	17	114.9
Flagler	3	83.3	1	58.8	2	105.3
Franklin	1	14.9	0	—	1	45.5
Gadsden (Ex.)	11	40.7	2	18.2	9	56.3
State Hospital	28	656.0	16	579.3	12	796.8
Gilchrist	0	—	0	—	0	—
Glades	0	—	0	—	0	—
Gulf	0	—	0	—	0	—
Hamilton	3	30.3	0	—	3	75.0
Hardy	3	24.8	3	27.0	0	—
Hendry	2	52.6	1	32.3	1	142.9
Hernando	0	—	0	—	0	—
Highlands	8	66.7	3	34.9	5	147.1
Hillsboro	101	62.5	46	35.1	55	179.2
Holmes	4	26.0	3	20.7	1	111.1
Indian River	1	10.4	1	14.9	0	—
Jackson	6	16.1	2	8.5	4	29.2
Jefferson	3	22.1	1	25.0	2	20.8
Lafayette	1	23.6	0	—	1	185.2
Lake	14	45.0	7	31.5	7	78.7
Lee	8	45.8	4	29.0	4	121.2
Leon	11	38.7	2	17.4	9	53.3
Levy	6	45.5	3	38.5	3	55.6
Liberty	1	25.9	0	—	1	89.8
Madison	6	33.3	3	34.1	3	32.6
Manatee	18	77.6	7	40.9	11	180.3
Marion	16	51.1	6	36.8	10	66.7
Martin	2	37.7	2	57.1	0	—
Monroe	13	97.9	10	92.5	3	121.4
Nassau	5	54.7	1	17.4	4	117.8
Okaloosa	1	7.9	1	8.5	0	—
Okeechobee	0	—	0	—	0	—
Orange	107	169.0	56	115.0	51	349.3
Osceola	3	30.8	1	13.4	2	89.3
Palm Beach	39	72.6	13	36.4	26	144.4
Pasco	2	17.2	0	—	2	111.1
Pinellas	41	62.2	29	56.1	12	84.5
Polk	29	33.0	13	18.8	16	85.6
Putnam	14	75.1	3	28.8	11	137.5
St. Johns	7	39.8	3	25.6	4	68.4
St. Lucie	4	38.8	1	16.1	3	73.2
Santa Rosa	1	6.1	0	—	1	52.6
Sarasota	6	41.1	3	27.8	3	78.9
Seminole	8	33.1	0	—	8	65.6
Sumter	6	59.9	1	14.1	5	169.1
Suwannee	10	56.5	4	34.2	6	100.0
Taylor	3	27.1	1	13.6	2	53.7
Union	6	68.2	1	18.5	5	147.1
Volusia	24	43.4	9	24.1	15	83.8
Wakulla	0	—	0	—	0	—
Walton	1	7.2	1	8.6	0	—
Washington	2	15.0	1	9.8	1	32.3

EXHIBITS EVERYONE SHOULD SEE

AN elaborate display of exhibits has been planned for the convention of the Florida Public Health Association in Jacksonville, December 7 through 9. Those planning on attending are urged to budget their time in such a way that they can see each exhibit and derive full benefit from its scientific message by having a personal conference with exhibitors' representatives who will be in charge.

At the time of going to press the following exhibitors had signed contracts for space:

GILLILAND LABORATORIES

An exhibit of biological products together with a display of their Concentrated Anti-meningococcic Serum and Pneumonia Products.

SURGICAL SUPPLY COMPANY

Extensive display of the most modern and scientific surgical equipment and supplies.

SEALTEST, INC.

Display of various by-products resulting from research of particular interest. The extent of Sealtest's activities in research, quality control and consumer service will also be exhibited. This is the same exhibit as shown at the American Public Health Association convention.

DERMETICS COMPANY, INC.

Various types of vitamin compounds and Dermetics Hydronized Oils.

KELEKET X-RAY COMPANY

Complete exhibit of x-ray equipment and supplies.

THE NATIONAL DRUG COMPANY

Biological products, Pharmaceutical and Biochemical products.

COCA-COLA COMPANY

Coca-Cola will be served to the delegates with the compliments of the Coca-Cola Company.

TUBERCULOSIS EXHIBIT

Dr. A. J. Logie, Director of the Division of Tuberculosis, State Board of Health. X-rays of chests of persons apparently free of tuberculosis and those affected with the disease will be displayed in cooperation with Florida Tuberculosis and Health Association.

LABORATORY EXHIBIT

Dr. J. N. Patterson, Director of Laboratories, State Board of Health, will present a scientific exhibit demonstrating the etiologic or causative agent of many of the commonest infectious diseases such as syphilis, gonorrhea, malaria, diphtheria, tuberculosis, hookworm, rabies, typhoid. Specimens of blood and spinal fluid showing both positive and negative Kahn reactions will be on display. Also a display of agglutination work as used as an aid in the diagnosis of the following diseases: typhoid, paratyphoid, A & B tularemia, undulant fever, Brill's.

PASTEURIZATION EXHIBIT

Dr. Arthur H. Williamson, State Dairy Supervisor, State Board of Health, will present a demonstration of a complete and properly arranged pasteurization equipment.

DUVAL COUNTY HEALTH UNIT

Exhibit of general disease program being conducted in Duval County.

HILLSBOROUGH COUNTY HEALTH UNIT

Display of two clinics on wheels, one a dentomobile housing a dental clinic, the other a healthmobile housing a general clinic now being used principally in a syphilis-control program.

LEDERLE LABORATORIES, INC.

Up-to-the-minute information on prophylaxis and therapy in the treatment of scarlet fever, pneumonia, measles and other diseases. Also, a comprehensive display of products with descriptive technical information.

MULTIGRAPH SALES AGENCY

Demonstration of a duplicating machine capable of doing a wide variety of duplicating work.